

THE
HISTORY AND GEOGRAPHY
OF THE
MISSISSIPPI VALLEY.

TO WHICH IS APPENDED
A CONDENSED PHYSICAL GEOGRAPHY
OF THE
ATLANTIC UNITED STATES,
AND THE WHOLE
AMERICAN CONTINENT.

THIRD EDITION.

BY TIMOTHY FLINT,
AUTHOR OF 'RECOLLECTIONS OF THE LAST TEN YEARS IN THE
MISSISSIPPI VALLEY.'



'SALVE MAGNA PARENS.'

IN TWO VOLUMES.

VOL. I.



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E. H. FLINT.

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ENTERED according to Act of Congress, in the year eighteen hundred and thirty-one,
by TIMOTHY FLINT, in the Clerk's Office of the District Court of Ohio.

TO
JOSEPH PEABODY, ESQ.

SALEM, MASSACHUSETTS.

SIR:

I have ventured to inscribe this book with your name, for the following reasons: I wished to prove, that much as I have wandered, my heart and my affections have still had their stationary points. It is my pride to hope, amidst all the vicissitudes through which I have passed, that the friends of my youth will be those of my age. Years in their flight will never shed the mildew of oblivion over kindnesses which have marked every period of my intercourse with you. Those kindnesses are alike associated with the remembrance of scenes that have passed in the land of my birth, and in distant regions west of the Mississippi. To you and one other friend, it is owing that I ever appeared before the public. I know not if the public will thank you, or if it ought. I feel that I, at least, ought never to forget the kindness and munificence of the motive. While your keels plough every sea, bringing home the rich harvests of commerce, I have always known you the earnest and consistent friend of the sacred soil and the plough. This acquaintance, with predilections apparently so foreign from those which have governed your pursuits in life, has adaeed an inducement to inscribe to you a book, which, while it presents a brief

sketch of all the great interests of our country, dwells with most detail upon the fertility of the American soil, and the uncouthed millions of acres of its untilled and teeming wilderness, yet to be occupied by independent and happy yeomen.

Fortunate as has been the general course of your career since my first work was inscribed with your name, you have experienced a loss as severe as can try the human heart, and have sustained it with a firmness of Christian philosophy, which proved that in the midst of prosperity you had not forgotten on what tenure we hold all the blessings of this mutable existence.

May you continue to enjoy the luxury of doing good, in the tranquil repose of resignation in the midst of the children that remain to you, rendering your age as happy as your past life has been honorable and useful.

With feelings of indelible gratitude and respect,

I subscribe myself your friend and humble servant,

TIMOTHY FLINT.

CONTENTS OF VOL. I.

INTRODUCTION. General features of the Mississippi Valley, 17. Face of the Country, 18. Minerals, 29. Climate, 31. Diseases, 35. Trees and shrubs, 40. Vines and creepers, 50. Shrubs, 53. Herbs, grasses, and flowering plants, 54. Medicinal plants, 57. Animals, 66. Birds, 74. Reptiles, 78. Fishes, 83. Rivers, 91. Indians, or Aboriginal inhabitants, 107. Monuments, 131. Present Population, 134. National character of the Western People, 140. Religious character of the Western People, 146. Pursuits of the People, 152.

CIVIL HISTORY, 164. Settlement of Canada, Florida, and Louisiana, 165. Character of the Colonists, 166. Settlements on the Ohio and Monongahela, 167. Settlement of Tennessee and Kentucky, 167. Defeat of the Kentuckians at the Blue Licks, 168. Settlement of Ohio, 169. Invasion of Pensacola, 171. Massacre of the French at Natchez, 171. Braddock's Defeat, 172. Victory of Wolfe, capture of Fort London, and close of the War, 172. War of the American Revolution, 173. Peace, 174. Spanish Treaty, 175. Indian War, and Peace, 175. Western Insurrection, 176. Cession of Louisiana, 177. Burr's Expedition, 177. First Steam Boat on the Western waters, 177. Renewal of the Indian War, 177. Surrender of Detroit, and Indian War in the South, 178. Massacre of the Raisin, siege of Fort Meigs, defence of Fort Stephenson, victory of Perry, and defeat of General Proctor, 179. Death of Tecumseh, and invasion of Louisiana by the British, 180. Battle of the eighth of January, 181. Peace, 182. State of the coun

try, 182. Failure of Banks, 184. Relief Laws, 185. Establishment of a sound currency, 185. Immigration, 186.

FLORIDA, 199. Climate, 199. Productions, 201. Minerals, 203. Animals, 204. Birds and Fish, 204. Serpents, 205. Insects, Bays, Inlets, and Sounds, 206. Rivers, 207. Islands, Curiosities, 208. Fountains, Lakes, and Springs, 209. Savages, Civil Divisions, and Population, 210. Comparative advantages of Immigration to Florida, 211. Chief Towns, 212. History, 215. Acres of marketable Land, 217.

ALABAMA, 218. Civil Divisions, and Population, 218. Rivers, 219. Face of the Country, Soil, &c., 220. Character of the Population, 222. Seminaries, Climate, and Diseases, 223. Employment of the People, and Chief Towns, 224. County Towns, and Constitution and Laws, 227.

MISSISSIPPI, Names of Counties, Population, Face of the Country, 228. Rivers, 229. Islands, Climate, 231. Indians, 233. Agriculture, and Pursuits of the People, 234. Attention to schools, &c., Con-
stitution, Chief Towns, 235. History, 237.

LOUISIANA, Parishes, Population by the Census of 1830, 238. Face of the Country, Soil, &c., 239. Agriculture and Productions, 243. Slaves, 248. Rivers and Lakes, 250. Islands, 258. Bays, Prairies, 259. New Parishes, Fortifications, 262. Chief Towns, 263. Roads and Canals, 271. Constitution and Laws, 272. Character, 274. Religion 275.

ARKANSAS TERRITORY, Civil Divisions, 276. Face of the Country, 277. Rivers, 278. Soil and Productions, 282. Climate and salubrity, Settlements, 284. Chief Towns, 285. Indians, 286. History, 287.

MISSOURI, Civil Divisions, 288. Population, Face of the Country, Soil, 289. Productions, 291. Animals, 294. Agriculture, 295. Houses, Climate, 296. Salubrity of the Country, 298. Scenery, Roads, &c., 299. Minerals, Fossils, &c., 300. Rivers, 303. Game, &c., Chief Towns, 308. Constitutions, Laws, &c., Manners, &c., 313. History, 316.

ILLINOIS, Civil Divisions, 319. Population, Face of the Country, 320. Rivers, 325. Minerals, Climate, 328. Agriculture and Manufactures, Chief Towns, 329. Diseases, &c., 331. Roads, Public Improvements,

Seminaries, &c., Constitution and Laws, 332. History, 333. Curiosities, 334.

TENNESSEE, Civil Divisions, 336. Face of the Country, Earths, Fossils, and Salts, 338. Climate and Productions, 339. Rivers, 340. Agriculture, Produce, and Manufactures, Chief Towns, 341. Natural Curiosities, 343. Constitution, Schools, 345. History, 346.

KENTUCKY, Civil Divisions, 347. Population, 349. Face of the Country, 350. Rivers, 351. Minerals and Mineral Waters, 353. Agriculture and Produce, 354. Chief Towns, 355. Education, 363. Curiosities, &c., 367. Characters, Manners, &c. 368. Religion, 369. Constitution, Government, &c., 370.

INDIANA, Civil Divisions, 371. Population, Face of the Country, Soil, &c., 373. Climate, &c., 375. Rivers, 376. Chief Towns, Character of the Country in which they are situated, 378. Navigable Waters, 386. Indians, 387, Game and Fish, Minerals and Fossils, Antiquities, 388. Curiosities, Roads and Canals, Seminaries, 389. Constitution and Government, 390. History, 391. Revenue, 392.

OHIO, Civil Divisions, 393. Population, Face of the Country, 395. Agricultural Productions, 397. Rivers, 398. Minerals and Mineral Springs, 406. Climate, 407. Antiquities, 408. Increase of Population, Religion, 409. Trade and Manufactures, Colleges and Seminaries, 410. Chief Towns, 412. Military Positions, Roads and Canals, 425. Militia, Penitentiary, Government, 626.

WEST PENNSYLVANIA, Population, Face of the Country, Education, 428. Inhabitants, Chief Towns, 429.

WEST VIRGINIA, Face of the Country, 435. Streams, Chief Towns, 436.

MICHIGAN, Civil Divisions, 438. Population, Face of the Country, Rivers, 439. Indians, 440. Climate, 441. Agriculture, Manufactures, Exports, &c., Chief Towns, 442. Government, 443. History Sketches of the Lakes, and the River Niagara, 444.

NORTH-WEST TERRITORY, Rivers, 451. Face of the Country, Minerals, Climate, 452. Towns, 453.

MISSOURI TERRITORY, Face of the Country, 455. Mountains, 456.
Rivers, 457. Climate, 459.

OREGON TERRITORY, 462. Rivers, Face of the Country, 463.
Temperature, 464. Discovery of the Country, Mexican States, 466.

PREFACE.

HAD the author been aware, when he assumed this task, of the amount of labor and difficulty in which it would involve him, he would have shrunk from it in dismay. But he had announced the work, and made no inconsiderable progress in it before a full view of the difficulties and discouragements opened upon him. One of the difficulties, and that by no means an inconsiderable one, was that of procuring materials for all that part of the work which could not be supplied by his own personal observation. From a general consciousness of the western people of the incompetence of most of those who have assumed to collect materials for works of this sort, and an unwillingness that their names should stand as authorities, it has happened that they who were most capable of furnishing materials, have heard with indifference and neglect solicitations to furnish such materials.

There seems to be but one sure and adequate avenue to such collection; and that is, to travel from state to state, and from capital to capital, to make it in person. Such is the expense attending this mode, that very few, who belong to the proverbially poor fraternity of authors, can afford it. Such, also, is the length of time necessary to complete such a tour, with the requisite deliberation and delay, that, owing to the rapid changes effected in the scene by time, the first part of the sketch has become an inadequate representation before the last is completed. Whatever be the industry, honesty of intention, and ability of the author of such a work, he must be content to prepare it under all these disadvantages, and identify his fortunes with a class of writers, whose writing upon similar subjects, however deserving, have rapidly passed into oblivion. In addition to these preliminary difficulties, the author had to encounter that of ill health; which, whether it be an allowed plea to enter in palliation of defects or not, is certainly a very great impediment in prosecuting works of this sort. At the the same time, his hands have been filled with laborious avocations of another kind.

But it is unnecessary to dwell on these, and various other difficulties easy to name. The author had given a pledge, and *'put his hand to the plough.'* He felt, too, that he had some grounds on which to assume such a work. He had devoted the best portion of twelve years to exploring the western country. He had remained one or more seasons in each of its great divisions. He had been familiar with Cincinnati, St. Louis, and New Orleans, the points most central to the information and resources of their respective divisions, and had resided in each of those capitals. He had traversed this great valley in all its chief directions, in an employment which had necessarily brought him in contact with all classes of its people, and all its aspects of society. He had had abundant communications with its scholars and distinguished men. As an earnest lover of nature, he had contemplated nature in the west, in the original, and in all her phases. On foot, and alone, he had wandered beside her long and devious streams. He had been between two and three hundred days on the Mississippi and its tributary waters. He had published *'Recollections'* of these journeyings, which had been received by the public with great kindness. His chief efforts, as an author, had been directed to bringing the people of the west acquainted with one another, and the beauty and resources of their own great country. He hopes it will not be deemed assumption for him to say that he has done something towards bringing about an intimacy of good feelings between the elder sister, whose fair domain is the east country, the fresh breeze, and the shores of the sea; and her younger sister, whose dotal portion is the western woods, and the fertile shores of the western streams.

A kind of affectionate feeling for the country where he has enjoyed and suffered all that the human heart can be supposed capable of feeling on this side of the grave; which contains his children, his charities, and all those ties which call forth aspirations for its well-being after he shall be in the dust, enlisted his first purpose to commence this work. The general amenity of its aspect; its boundless woods and prairies; its long and devious streams; and its unparalleled advancement in population and improvement, filled his imagination. He had seen the country, in some sense, grow up under his eye. He saw the first steam boat that descended the Mississippi. He had seen much of that transformation, as if of magic, which has converted the wilderness to fields and orchards. He has wished to transfer to others some of the impressions which have been wrought on his own mind by witnessing those changes. Such were some of the motives that impelled him to undertake this work.

He has a distinct foresight of the views which some will entertain and express in reference to this work. But he can pronounce with perfect simplicity and confidence, that his least fears of criticism are from those

whose candor, experience, and ability best qualify them to judge. At any rate, he will cheerfully suffer the sentence, whatever it may be, which the western people shall pass upon this work. To those who have predicted that he would draw too largely upon the language, and the coloring of poetry end the imagination, he can only say, that it has been his first aim to compress the greatest possible amount of useful information into the smallest compass. He has, therefore, rather to apprehend that the intelligent will find it too statistical and laconic, too much abbreviated, and divested of detail.

Something more than half the compass of this work is original, in the strictest sense of the word, the remarks and details being the fruit of his own observation or reflection. What has been suggested by the reading and observation of those who have preceded him in labors of this kind, will be generally found, he thinks, to have been assimilated, to use a medical term, and to have received in his mind the moulding of his own manner. But touching the matter obtained from other books, he claims no other merit than that of being a laborious and faithful compiler. In some instances, where the thoughts could not be better, or more briefly expressed, the words of the original authors may have been used. He has referred to at least thirty volumes; and to those who might feel disposed to suggest that he has made a book from the labors of others, he would beg leave to remark, that if they shall be pleased to think that they have found the substance of all these volumes in this work, he shall consider it the highest encomium they can pass upon it.

He feels it to be a duty, once for all, to make the most frank and ample avowal of the sources to which he has chiefly repaired for compilation. That works of history and geography must necessarily be prepared in this way, no person, at all acquainted with the nature of such writings, need be told. As well might a traveler presume to claim the fee-simple of all the country which he has surveyed, as a historian and geographer expect to preclude those who come after him from making a proper use of his labors. If the former writers have seen accurately, and related faithfully, the latter ought to have the resemblance of declaring the same facts, with that variety only, which nature has enstamped upon the distinct elaborations of every individual mind. Those who have preceded him, have availed themselves of the observations of their predecessors. The author flatters himself that this work, in its turn, will be consulted by those who will come after him. As works of this sort become multiplied, voluminous, and detailed, it becomes a duty to literature to abstract, abridge, and give, in synoptical views, the information that is spread through numerous volumes. So far from its being the tendency of a work of this kind to undervalue and preclude the use of works, from

which it is compiled, he would hope, that adverting to the original works, by pointing to the sources of his information, would have the contrary effect of inducing those readers who wish to view the subject in all its details and bearings, to repair to those works and rescue them from oblivion. Many of them are works of great merit, and have undeservedly passed into disuse.

He has not considered it necessary to give individual quotations, or to disfigure the margin with references and authorities. The reader ought to rely upon the fact, that nothing is here put down which has not been previously weighed in the author's mind, and admitted, either as matter of his own observation, or on what he conceived to be the competent and credible testimony of others. Sometimes, upon a particular point, he has adopted the phraseology of the author entire. At other times, he has adjusted the views of one author by another, endeavoring to settle a just medium from the result of his own observations.

For the topographical and geographical parts, he has chiefly consulted the following authors, viz: Charlevoix, Volney, Bafram, Breckenridge, Darby, Stoddard, Atwater, Ohio and Mississippi Navigator, Dana, Emigrant's Guide, Long's Expeditions, Pike, Schoolcraft, Beck, successive extracts from Cincinnati Directories, and Woodruff's Engraving of the city, correspondence with Mr. Dunbar of Mississippi, Dr. McKay of Arkansas, Judge Carr of St. Louis, Rev. M. Peers, and Professor Caldwell of Kentucky, Daniel Bryan, Esq. of Alexandria, and Messrs. Lanier and Farnham of Indiana; beside, short extracts from various correspondents and cotemporary Gazettes, too numerous to specify.

In reference to the second part of this work, it is from the obvious necessity of the case, more simply a work of compilation than the former. He has indeed brought every item of his own personal observation to bear upon it. But that observation in an individual case must be limited. He could not name, if disposed, all the sources from which he has sought and obtained information. For many facts, he has relied on the authority of Mr. Worcester's excellent Gazetteer. The portions of the work that treat of the country beyond the United States, have been chiefly drawn from Captain Parry, Malte Brun, Humboldt, Breckenridge, and Bullock. But the intelligent reader will readily understand, that in the present state of our intelligence, touching the physical geography of Mexico and South America, Malte Brun has left little to be said after him. Of course he has been the authority chiefly followed.

He regrets that other motives than his own inclination, inculcated by experience, have compelled him to omit the greater portions of the history of the western country, and replace it with more extended details of

statistical and physical geography, the points of absorbing interest about which emigrants to the great West are chiefly solicitous.

He would have been amused, if an author were apt to be so amused, by the criticisms elicited by his first edition. He desires to withdraw his hands from the scalding element of cotemporary history, while the parties are still on the stage. The manner and form must have been fashioned to the dictation of a thousand individuals to have pleased; and what is worse, the emendation proposed by one would have been the most annoying blemish to another. He knows no remedy for the deluge of criticism that inundates the land, but a callousness of patience equal to every proof. The reader knows better than himself, that it is a great evil to write a great book. Though he is desirous of perpetrating the very offence, there are but too many with whom it is a more unpardonable fault to write a good one.

His former work met with a criticism equally generous, eloquent, and just, in the *North American Review*, and a shorter but not less generous and happy notice in the *New York Evening Post*, he has no doubt, from the pen of William Bryant, Esq., of whose laudatory notice, if any one were not proud, he would be more or less than man.

He would have attributed something of the fervid and affectionate notice of that work, he presumes from the pen of his friend, Dr. Caldwell, to the partiality of a long and tried friendship, had he not been aware, that he holds even his partialities in severe subjection to his judgment.

To Morgan Neville and Charles Hammond, Esqrs., he is indebted for much aid in furnishing books and documents on this and various similar occasions. It would be ungrateful in him to close without referring to the continued kindness of Henry Starr, Esq., who confers favors with so much ease and unconsciousness as, probably, to have forgotten that he owes him this public expression of his gratitude.

For the rest, every indulgent reader will overlook such errors of the press as have occurred, when informed, that a considerable part of the work was carried through the press while the author was laboring under severe indisposition.

Cincinnati, January 1st, 1832.

The following extract from a communication from Mr. Neville to the author of this work, in reply to certain inquiries, gives a condensed and hasty account of the dreadful flood which has just spread destruction over an extent of rich and fertile country, of at least 1,000 miles. As it records an event almost simultaneous with the publication of the "Geography," and which must form an important event in the history of the West, I have thought it not irrelevant to give it a place in the Preface. It will be of more convenient reference, than the columns of a newspaper.

CINCINNATI, February 29th, 1832.

SIR: In reply to your interrogatory on the subject of the freshet, which at this moment presents such a scene of desolation and suffering, I can state that in my opinion such a flood has never happened since the settlement of the Western Country. I was born on the banks of the Ohio, and my recollection extends back to a period when Cincinnati was but a village; and I am perfectly satisfied that I never saw the water so high by many feet.

The Ohio, after having been frozen up and covered by the thickest ice which was ever witnessed in this city, during the whole of the month of December and part of January, broke up about the 6th of that month, doing incalculable damage throughout the whole course of this noble stream. From that period until about ten days since, there has been a succession of rains, which were sufficient to keep the river and its tributaries at heights rather greater than ordinary; on the 7th of this month, the water commenced swelling with uncommon rapidity, with a settled rain, the wind at S. W., and the temperature such as to lead to the conclusion that the rain was as extensive as it was heavy. On Saturday night the 10th inst. it increased to a perfect storm. On Monday, 12th, the Ohio had gained the maximum of 1826, estimated the greatest rise for the last 17 years. At this point it appeared to become stationary, and probably had commenced receding. A few hours produced a melancholy change; the river again advanced, and passing the old marks of 1815, and 1793, poured its flood through the aqueduct under Main street into Columbia. Shortly after, the river at the lower part of the town broke over the levee, and joining the water rushing out of the aqueduct, presented the novel and distressing sight of a rapid river having Columbia street for its bed. At this time the merchants in Main street, between Front and Columbia, after ineffectually attempting to keep the water out of their cellars by clay embankments, yielded the contest and turned all their exertions to removing their goods from their cellars to their first floors. The merchants in Front street had been driven to this alternative a day or two before. The draymen now having nothing to do in their usual business, found ample employment in transporting business men and others, attracted by curiosity, across Columbia street at the different cross streets, from Broadway down to the low ground at the west end of the town. In the mean time the river continued rising at a rate seldom witnessed even when confined within its banks; the merchants in Front street were forced to remove their property to the second stories—those on Main soon found it necessary to follow their example. Drays disappeared, and small crafts of various and novel construction took their place. It

was then found that precautions for security had been postponed too long. A vast amount of merchandise and produce was destroyed before it could be raised to the second stories. The lower part of the town was completely inundated, and the small frame houses, which composed the greatest amount of buildings in that section of the city, were threatened with destruction. I have not yet understood how many have been destroyed, but in looking down upon them from Fourth street, I counted yesterday nearly 20 entirely upset. The call of humanity was obeyed before that of interest; laborers could not be had in sufficient numbers to assist the merchants, because they were engaged in removing hundreds of wretched families from the flood below. There were several steam boats in harbor, and the yaws of all found ample employment. The edge of the water below Race street presented scenes only equalled in cases of wide spread conflagrations, such as that at Fayetteville, last summer. Boats were constantly landing unfortunate families, who, with their little property, remained exposed to the weather until the city authorities could provide shelter and food. Finally, on Thursday the 16th inst. the work of desolation was consummated; the water broke over the bank from Deer Creek bridge at the east end of the city, to Main street, turned the current of Columbia street down, and laid the whole of the town lying between Lower Market or Second street and the river, under water, except the large stores on the south side of Pearl and Market streets. The cellars of those, however, were filled with water, which, with little variation, rose in them all to within an inch or two of the floors. I believe the cellars on the north side of these streets are partially filled with water also.

The scene presented at this moment, and the revolution produced in the appearance of things can scarcely be believed by ourselves; it resembles more the extravagance of a dream, than reality. All that part of the town below Walnut street under water is occupied by private residences, and probably includes nearly one-third of the population of the city. Water, Front, and Columbia streets are distinguished by many excellent brick houses; the population is more dense than in any other portion of the town. When the water reached the first floor, the families removed up stairs, and those who were sufficiently provident to have fuel carried up in time, have remained ever since, (now four days,) in their houses, surrounded by a sea in miniature; many, however, have abandoned their houses and taken up their residence at public houses, and with their friends on the hill. Notwithstanding this melancholy state of things, the mode of living is matter of amusement to many of the families thus surrounded. When misfortune cannot be avoided, there is a kind of instinctive philosophy in man, which makes us submit often with a good grace. Thousands of boats have sprung into existence, like Minerva, from the brain of the "Thunderer." The scene is absolutely Venetian. Every house has its boat, already called a gondola, in which the owners travel about on their necessary vocations; visits are regularly made in this way. In passing down to a friend's house yesterday in his "craft," I passed two or three gondolas with young gentlemen in them, under the windows of their female acquaintances; I cannot say decidedly that they were breathing vows or wafting sighs to the ears of the laughing fair ones; but I did observe wicker baskets drawn up by cords, which, on inquiry, I found to be filled with refreshments instead of billets. This employ-

ment, if not so dangerous was doubtless equally useful as that of the old Knights Errant relieving imprisoned damsels from the castles of giants and magicians.

The waters have commenced receding this day, the 19th inst.; but the river falls slowly. The amount of damage, exclusive of the actual suspension of all business, cannot be yet estimated; but it must be very considerable. I have already heard of several individuals who have lost from 4 to 6,000 dollars in damaged goods; but the worst remains. We dread to see the state of the streets and cellars when the river subsides. It will be terrible, and unless the most vigorous measures be immediately taken, our beautiful and flourishing city will probably next summer be the theatre of some malignant disease.

This flood forms an era in the history of the Valley of the Mississippi; it is probably four to five feet higher than any freshet which has happened since the first settlement of the country; and when we reflect that it has swept through a country well filled with towns and villages, and distinguished by fertile fields and rich settlements, for the distance of nine hundred miles, our anticipation must needs be most gloomy. The loss of life we fear, must be great; the loss of property can never be calculated. The bottom ground plan of Cincinnati is as high, if not higher, than any other bottom situation of the river.

Upon the whole, the citizens of Cincinnati will have cause to remember the winter of 1831-2. It was ushered in by a series of cold weather never witnessed before in this country, either for intenseness or duration, which closing the river and canal for six weeks, made fuel as dear and scarce as in the Atlantic cities. Next the Water Works was burnt down, which, in addition to the want of water, produced the necessity of establishing Volunteer Watches, to prevent further suffering from fires. And to conclude, we are now visited by a flood of a character which, twenty days ago, we would have considered as improbable as a collision with the expected comet!

The water, at its highest elevation, was sixty-three feet above low water mark. The velocity of the current six miles and a quarter per hour.

HISTORY AND GEOGRAPHY

OF THE

VALLEY OF THE MISSISSIPPI.

WE do not intend, in these introductory remarks, to enlarge upon so copious an article, as the geology of this Valley. We reserve more particular observations for sectional heads of this subject. We dismiss it here, by observing that the valley itself is universally of what geologists call secondary formation, with here and there boulders of granitic rock out of place; that the western slopes of the Alleghanies are generally of what is called the transition character; that the southern extremities of the lakes are transition, and the northern granitic and primitive in their formation; that the Rocky Mountains are, for the most part, primitive, until we approach the Gulf of Mexico, in the Mexican State of Texas, where the strata of rock again appear to be blue limestone.—Over all the immense valley between these limits, there are marks of recent formation, apparent indications, as Volney conjectured, that the country was once submerged, and has, not many ages since, emerged from under waters, and that to casual inspection, the vallies, the bluffs, and the hills, the regular lamina of stones, and strata of soil, the marine exuvie, and in short, all the physical aspects of the country wear the appearance of once having been the bed of seas, or fresh water lakes.

From its character of recent formation, from the prevalence of limestone every where, from the decomposition which it has undergone, and is constantly undergoing, from the considerable proportion of decomposed limestone in the soil, probably results another general attribute of this valley—its character of uncommon fertility. We would not be understood to assert that the country is every where alike fertile. It has its sterile sections. There are here, as elsewhere, infinite diversities of soil, from the richest alluvions, to the most miserable flint knobs; from the

tangled cane brakes, to the poorest pine hills. There are, too, it is well known, towards the Rocky Mountains, wide belts that have a surface of sterile sands, or only covered with a sparse vegetation of weeds and coarse grass. But of the country in general, the most cursory observer must have remarked, that, compared with lands apparently of the same character in other regions, the lands here obviously show marks of singular fertility. The most ordinary, third rate oak lands, will bring successive crops of wheat and maize, without any manuring, and with but little care of cultivation. The pine lands of the southern regions are, in many places, cultivated for years, without any attempts at manuring them. The same fact is visible in the manner in which vegetation in this country resists drought. It is a proverb on the good lands, that if there be moisture enough to bring the corn to germinate, and come up, there will be a crop if no more rain falls until the harvest. We have a thousand times observed this crop, continuing to advance towards a fresh and vigorous maturity, under a pressure of drought, and a continuance of cloudless ardour of sun, that would have burned up and destroyed vegetation in the Atlantic country.

We have supposed this fertility to arise either from an uncommon proportion of vegetable matter in the soil; from the saline impregnations mixed with the earth, as evinced in the numberless licks, and springs of salt water, and the nitrous character of the soil, wherever, as in caves or under buildings, it is sheltered from moisture; or, as we have remarked, from the general diffusion of dissolved limestone, and marly mixtures over the surface. In some way, spread by the waters, diffused through the soil, or the result of former decomposition, there is evidently much of the quickening and fertilizing power of lime mixed with the soil.

FACE OF THE COUNTRY, &c. Our prescribed limits will necessarily dictate brevity to us, in touching on this topic. The Alleghany Mountains, as is well known, stretch along in ridges, that run parallel to each other with great uniformity. They form the eastern rampart of this great valley. The middle ridge appears to be generally the most elevated; to separate the waters of the Atlantic from those of the Mississippi; and gives name to the rest. Another of these ridges has the name of the Laurel Ridge, from the number of laurels growing on its sides.—Approaching these ridges they are a sublime object, as seen in the distance. They rise before you, apparently an impassable barrier, their blue outlines pencilled, like clouds on the sky, and their northern and southern extremities both running beyond the reach of vision. The ascent from the Atlantic side is generally more abrupt and precipitous, than on the the descent towards the valley of the Mississippi.

The last western range exhibits very strikingly the regular distribution of the lamina of limestone, and the uniformity of their dip, as though they had been laid, stratum upon stratum, by art. The composition is, for the most part, either limestone, argillite, gray wacke, and combinations of slaty matter, with sulphate of iron; in short, those kinds of combinations which occur between metaliferous limestone and inclined sand stone.

Between the Alleghany Mountain and the last western ridges, the tributaries of the Ohio begin to show themselves in the form of rivers. Their murmur is heard, as they rapidly roll along their rocky beds, breaking the stillness of the mountain forest; and they often wind great distances before they find their place of escape from the mountains. The scenery on one of the transits over the mountains has arrested the attention of most travellers. A turnpike road leads near where the Loyalhanna has divided the Laurel Ridge to its base. The view that appertains to this chasm is at once striking and sublime. A beautiful mountain stream, overhanging mountains, the breeze sweeping down the sloping forest, profound solitude, the screaming of the jay, and the dash of the river, rolling rapidly along its rocky bed, and its waters hidden under the shade of laurels, conspire to soothe and elevate the mind.

After we descend the last mountain summit towards the valley, the country is still a succession of high hills, generally rounded smoothly down their declivities, and with more or less of table land on their summits. On the very tops of the Alleghanies we discover the indications of approach toward the region of coal. On the summits of the hills beyond the mountains, the eye not only traces it among the clay slate, by the blackened surface of the road, but the sense of smell detects it in the atmosphere about the houses, and indicates that in the midst of woods it is the easiest fuel to procure. Its dark smoke streams from the funnel of the blacksmith's forge. Pittsburgh and Wheeling are blackened with its impalpable effluvia.

Following the course of the Alleghanies, south of the Ohio, and along the foot of the ridges, is generally a country of undulating and elevated swells, covered, while in its natural state, with a heavy forest. The country about Pittsburgh may be called hilly, though there are few hills so precipitous as not to be susceptible of cultivation. Through the Pennsylvania and Virginia sections of the Mississippi Valley, you traverse hill beyond hill, generally with small and fertile vallies between them. Some of these hills have almost the character of mountains. They are for the most part, however, susceptible of good roads.

On the National Road, as we descend the last mountain towards Brownsville and the valley of the Monongahela, the eye takes in an horizon, as broad as it can reach, of hills, vallies, orchards, and pasture grounds of champaign and rich country in the two States. The contrasts of the open pastures and fields, pencilled by a perfectly straight line on the edge of the thick forests, and on the rounded summits of the hills, afford a delightful prospect. The finest parts of the interior of New England will scarcely compare with this view. The same may be said of views of Tennessee and Kentucky, as we successively approach them, in coming over the mountains from North Carolina and Virginia. After we have left the immediate vicinity of the mountains, Kentucky is neither hilly nor level, but has a general surface of delightful undulation. There are beautiful and extensive vallies, with only sufficient irregularity of surface to carry off the waters. Such is that charming valley, of which Lexington is the centre; and such is that embracing the barrens of Green River.

Tennessee is more generally hilly. The great ranges of the Alleghanies diverge into separate mountains in this State, and divide it into two distinct sections, called East and West Tennessee.

Keeping parallel with the mountains, and still advancing south, in Alabama the hills begin to subside, although the northern and western parts of this State may still be called mountainous. But on entering this State the features of the country begin manifestly to change. On the hills, instead of oaks and deciduous trees, we begin to hear the breeze in the tops of long leaved pines. We have a long succession of pine hills and fertile vallies between them. We soon mark another very striking change in the landscape. In coming from the Ohio we have seen the country, in a state of nature, universally covered with a thick forest, generally of deciduous trees, with here and there a rare holly tree, or other evergreen. We have afterwards traversed extensive pine forests of the black, or pitch pine, with tall straight trees, and the earth beneath them free from under brush, covered with grass, and almost entirely destitute of stones. In the rich alluvial vallies we remark a considerable portion of laurels. The forests preserve an unvarying verdure through the winter. We begin to notice these forests first giving place to the barrens, with a few sparse trees ranged, as in an orchard. These barrens are soon succeeded by prairies, or *savannas*, as they are here called. The hills have subsided to extensive, level and grassy plains; and this order of landscape continues, until we meet the belt of pine forest, that skirts the Gulf of Mexico. Its swampy and equable surface rises but little above the level of the gulf, and is separated from it, by a

margin of sand, driven into heaps by the mutual incessant action of the wind and the sea.

Beginning again on the north side of the Alleghany River, and descending that river between the north bank and the lakes, the first portion of the country is hilly; but as we descend towards the Ohio the country, though in some places, particularly along the Muskingum, hilly, is generally only gently waving, and is, on the whole, more level than the south side of the Ohio. Approaching the lakes the country becomes quite level; and there are various places in the northern parts of Ohio, Indiana, and Illinois, near the lakes, where the country is so level, marshy, and low, as in winter and spring, to be covered with water from four inches to a foot in depth. The north-eastern parts of Ohio may be considered hilly. In passing on the Great Road from Wheeling to Cincinnati there are, indeed, near the Scioto, considerable plains. But the general aspect of the country presents fine elevations, often a league across, with rich table land on the summits, and the declivities susceptible of cultivation. For five or six miles from either bank of the Ohio there are, almost universally, high hills of a singular configuration, known by the name of the 'Ohio Hills.'

From the Scioto the aspect of the country is more level; and on the waters of this river we begin to discover our approach to the wide prairies of the West. We open upon the fine level Pickaway, or Piqua prairies, or plains; and thence through the northern parts of this State, advancing west, along the plains of Mad River, and into Indiana, prairies become more common in the same proportion, as we advance farther west. The general surface of the timbered country is more level. As we approach the Ohio, the forest is more dense and uniform, and that river, in its whole course, originally rolled through an unbroken forest. In Indiana the proportion of prairie land is far greater than in Ohio; and in Illinois it has an immense disproportion over the timbered country. Back of Shawneetown, and between the waters of the Saline of the Ohio and those of the Mississippi, from the base of this level country springs up a singular chain of hills, which a recent traveller has seen fit to dignify with the name of mountains. The remainder of the State of Illinois may be, for the most part, designated as a country of prairies and plains.

Beyond the State of Illinois, advancing north, on the east side of the Mississippi, pine hills, ponds, lakes, marshes, and prairies alternate to the sources of that river. The plashy regions in that quarter are covered with thick wild rice, and there providence has provided inexhaustible pasture for the countless numbers and varieties of wild water fowls, that migrate to these regions, to fatten in the autumn, before their return to the South. Near Rock River, of this region, we come upon the hills



and swells of land in that extensive district, called the mineral country, where the ores of lead are so plentifully found.

The surface of the country west of the Mississippi is generally much more level than east and south of it. There are bluffs, often high and precipitous, near the great water courses. Not far west of the Mississippi, there is much country covered with flint knobs, singular hills of conical shape, that with a base of a mile in circumference, often rise four or five hundred feet high, and are covered on their sides with *fleche*, or arrow stones, of a siliceous substance, not unlike flints, and used as substitutes for them. There are, as in the country between the St. Francis and White River, hills that might almost warrant the designation of mountains, appearing to be continuations of the Alleghanies, whose spurs seem to cross the Mississippi in the Chickasaw bluffs, and to be continued west of it in the St. Francis hills. But the general surface of the country, between the Mississippi and the Rocky Mountains, is, comparatively speaking, a vast plain, probably, as we have remarked, the largest one on the globe. Except in the bluffs of the rivers, and on the flint knobs, it is on the surface free from stones, to an astonishing degree. The surface of prairie, a hundred leagues west of the Mississippi, is probably, in comparison with the timbered country, in the proportion of twenty to one. The little timber that is seen, occurs only on the skirts of water courses. As we recede from the margins of the Missouri, the Platte, the Yellowstone, Arkansas and Red rivers, the prairies become more dry, sterile, and destitute not only of wood and water, but of all vegetation. Travellers wander for days in these desolate wastes, without having either wood or water in their horizon, over sandy deserts, scantily covered with coarse grass and weeds. This is the appropriate range of the buffalo. In some parts there are, in fact, wastes of moving sand, like those of the African deserts.

On the lower courses of the Missouri, St. Francis, White, Arkansas and Red rivers, we see extensive alluvions skirting their banks, of great and inexhaustible fertility. The alluvial prairies, too, in these regions teem with vegetation. But on their upper waters, as soon as we have receded from a narrow and fertile belt on their shores, the boundless waste of the prairies beyond, seems destined to be the last resort of buffaloes, or the region of herds of domestic cattle, attended by migrating shepherds.

MOUNTAINS. We have seen, that the general character of the Alleghany ridges, is to stretch along in continued and parallel lines, the central ridge of which gives name to the rest. The spurs of these ridges, which in Kentucky, and particularly in Tennessee, under the names of the Bald, Iron, Laurel, Yellow, Unaka, Copper, Clinch, Powell's, Cumberland, &c. originate streams, diversify and give grandeur to the scenery in these

States, are all in cultivated and populous regions, and will be described under the heads of the States in which they lie. The cliffs and rocks, of which they are composed, bear, as we have remarked, the general character of transition formation; and the strata have that lamellated regularity, and that uniformity of dip, or inclination, which have been scientifically described by geologists. These circumstances are so obvious and striking, as to produce, even in unobservant eyes, a degree of surprise.

That immense range of lofty mountains, which gives rise to the long rivers, that wind through such a vast extent of prairies, and come into the Mississippi on the west side, in almost its whole course runs wide from the limits of cultivation, and the haunts of civilized man.—Their formation, character and height, are comparatively but little known, and present descriptions of them must necessarily be vague and general. They will for ages only attract the gaze and astonishment of wandering hunters, or occasionally a few enterprising travellers, that will scale their summits on their way to the Western sea. Now and then, a savage, differently constituted from the rest, will pause on their snowy crags, be impressed with their sublimity, and think of the Great Spirit. The rest will continue to date their eras from the time when they hunted on their eastern or western declivities. It will be long, before the detached mountains, and the prominent peaks will be named, classed and described. It does not appear that many of them rise above the region of perpetual ice. Though from the passage of Lewis and Clark over them, and the concurrent testimony of others, in the latitude of 47° north, immense quantities of snow are on their summits, between the Missouri and Columbia, in the months of June and July. They are seen like a vast rampart, rising from the grassy plains, stretching from north to south. Sometimes their aspect is that of continued ranges, of a grayish color, rising into the blue of the atmosphere, above the region of the clouds. A great number are black, ragged and precipitous; and their bases strewn with immense boulders and fragments of rock, detached by earthquakes and time. From this iron bound and precipitous character, they probably received the appellation, 'Rocky Mountains.'

Whether any of them are volcanic or not, is not certainly known. We have often seen large masses of pumice stone floating on the Mississippi, and still oftener on the Missouri. These are generally of a reddish yellow, or flame color, and are among the largest and finest specimens of this kind of stone that we have seen. Whether discharged from volcanic mountains, or, as others assert, from hills of burning coal, is not certainly known. Mica is abundantly carried along by the waters, that flow from these mountains. There can be no doubt, that these ancient and mag-

nificent piles are of primitive formation. They are much higher, more rugged, and have generally a more Alpine character, than the Alleghanies. They apparently stretch along at about the same distance from the Western sea, as the former from the Atlantic. The great rivers that are discharged from their eastern and western declivities, wind still further between their interior and exterior ridges, in finding their passage through them. The Columbia, or Oregon on the west, and the Arkansas on the east, wind more than an hundred leagues, in search of a place of escape from the mountains.

As on the Alleghanies, the rivers that run in opposite directions from these mountains, generally have their sources near each other. In following the beds of these rivers up to their sources in the mountains, we find the easiest paths and the gentlest acclivities, by which to cross them. The character which they have gained, of being continuous, high, and every where alike rugged, and a barrier almost impassable, between the regions east and west of them, from the descriptions of the first adventurers who crossed them, seems now to have yielded to a very different impression. Various leaders of expeditions of trappers have crossed these mountains, in directions more southern than those of Lewis and Clark. They affirm that they found none of those formidable, and almost insurmountable barriers, which undoubtedly exist on the route of those distinguished travellers. We have at this moment under our eye, extracts from the journal of Mr. Ashley, the leader of an enterprising and powerful association for procuring furs, who has crossed these mountains at different points. This journal narrates the account of a passage over them, from the sources of the Platte to Lake Bueneventura, on the western side. It asserts, that he found an easy passage even for loaded carriages; with an ascent no where as sharp as on the national road over the Cumberland mountains to Wheeling. He even asserts, that the acclivity was so gentle, as no where to have an ascent of more than three degrees; and that nature has provided not only a practicable, but a good road quite to the plains of the Columbia. The testimony of travellers seems to be uniform, that to the eye, indeed, the ranges are unbroken and continuous. But nature appears every where to have indicated her wish, that no part of the earth should be interdicted by unsocial barriers from communication with the rest. Through the loftiest and most continued ranges there are found chasms, natural bridges, ascents along the beds of rivers, and corresponding descents on the opposite side, that render a passage over them comparatively smooth and easy.

We know not exactly on what ground travellers have classed this vast range into the divisions of the Rocky, Chepywan, and the Masserne

mountains. The ranges at the sources of the Arkansas, and running thence towards the gulf of Mexico, have so commonly borne the latter name, that they will probably retain it. A single peak of this ridge, seen as a landmark for immense distances over the subjacent plains, has been called, and we think, ought for ever to retain the name of Mount Pike. It is of incomparable grandeur in appearance, and has been differently rated at from seven to ten thousand feet in height. On the ridges of this range the Colorado of the Pacific, the Rio del Norte of New Mexico, the Roche-jauue, or Yellowstone, of the Missouri, and the Arkansas and Red rivers of the Mississippi, that have their outlets at such immense distances from each other, have their sources. It will hence be easily inferred, that this is the highest land of this part of North America.

Geographers have supposed, that it is a circumstance of course, that between all rivers, that have any length of course, there are ranges of hills, more or less elevated, separating the tributary waters of the one river from the other. It is often, but by no means always so, in this valley. Many of the large rivers have no other separating ridge, than a high and marshy plain, that discharges, as has been remarked, its waters from one extremity into the one river, and from the other extremity into the other. But, as a general rule, in the medial regions of this valley, the considerable rivers are separated from each other by ranges of hills, more or less distinctly marked. In this region of plains, where a person may have been born, and travelled to New Orleans, and lived to old age without ever seeing an elevation, that deserved the name of mountain, these hills become respectable by comparison. These ranges of hills are most considerable in the mineral country in Missouri, between St. Francis and White River, in Arkansas territory, between Washita and Red River, and between the latter river and the Sabine. South and east of the Mississippi, there are considerable ridges of this character in the states of Mississippi and Alabama. These ranges of hills will be more properly noticed, under the description of the states and territories, where they respectively occur.

The general surface of this valley may be classed under three distinct aspects; the thickly timbered, the barrens, and the prairie country. In the first division, every traveller has remarked as soon as he descends to this valley, a grandeur in the form and size of the trees, a depth of verdure in the foliage, a magnificent prodigality of growth of every sort, that distinguishes this country from other regions. The trees are large, tall, and rise aloft, like columns, free from branches. In the rich lands they are generally wreathed with a drapery of ivy, bignonia, grape vines, or

other creepers. Intermingled with the foliage of the trees are the broad leaves of the grape vines, with trunks, sometimes as large as the human body.—Frequently these forests are as free from undergrowth, as an orchard. Sometimes the only shrub, that is seen among the trees, is the pawpaw, with its splendid foliage and graceful stems. In other places, especially in the richer alluvions of the south, beneath the trees, there are impenetrable cane brakes and tangle of brambles, briar vines, and every sort of weeds. These are the safe retreats of bears and panthers. This undergrowth universally indicates a rich soil.

The country denominated 'barrens,' has a very distinct and peculiar configuration. It is generally a country with a surface, undulating with gentle hills, of a particular form. They are long and uniform ridges. The soil is for the most part of a clayey texture, of a reddish or grayish color, and is covered with a tall coarse grass. In addition to a peculiarity of feature, more easily felt, than described, the trees are generally very sparse, seldom large, or very small. They are chiefly of the different kinds of oaks; and the barren trees have an appearance and configuration, appropriate to the soil they inhabit. The land never exceeds second rate in quality, and is more generally third rate. It is favorable, in the proper latitudes, to the growth of wheat and orchards. On the whole, this country has an aspect so peculiar and appropriate, that no person, at all used to this country, is in doubt for a moment, when he enters on the regions of the barrens. There are large districts of this kind of country in Kentucky, Tennessee and Alabama. They are common in Illinois and Missouri, and are seen with more or less frequency, over all the valley of the Mississippi.

In this region, and in the hazel or bushy prairies, we most frequently see those singular cavities, called 'sink holes.' They are generally in the shape of funnels, or inverted cones, from ten to seventy feet in depth, and on the surface from sixty to three hundred feet in circumference. There are generally willows, and other aquatic vegetation, at their sides and bottoms. The people here have their own theories, to account for these singular cavities; and as an earthquake is the agent most likely to seize on the imagination, and the most convenient one to solve inexplicable results, they have generally supposed them the work of earthquakes. Others have imagined them the huge wells, from which the domesticated mammoths, and the gigantic races of past generations quenched their thirst. There is little doubt, that they are caused by running waters, which find their way in the lime-stone cavities, beneath the upper stratum of soil. We shall see elsewhere, that this stratum generally rests on a base of lime-stone; and that between this and the sub-strata, there are often continuous cavities, as we see in the lime-

stone caverns; and that in these interstices between the different strata of rocks, brooks, and even considerable streams pursue uninterrupted courses under ground. The cause of these sink holes was probably a fissure in the superstratum of lime stone. The friable soil above found its way through this fissure, and was washed away by the running waters beneath. In this manner a funnel shaped cavity would naturally be formed. In fact the ear often distinguishes the sound of waters running beneath, at the bottom of these sink holes.

The remaining, and by far the most extensive surface, is that of the prairies. Although they have no inconsiderable diversity of aspect, they may be classed under three general divisions; the heathy or bushy, the alluvial or wet, and the dry prairies. The heathy prairies seem to be of an intermediate character between the alluvial prairies and the barrens. They have springs, are covered with hazel and furzy bushes, small sassafras shrubs, with frequent grape vines, and in the summer with an infinite profusion of flowers, and the bushes are often overtopped with the common hop vine. Prairies of this description are very common in Indiana, Illinois and Missouri, and they alternate among the other prairies for a considerable distance towards the Rocky Mountains.

The dry prairies are for the most part destitute of springs, and of all vegetation, but weeds, flowering plants and grass. To the eye they are so nearly level, and the roundings of their undulations so gentle, that the eye, taking in a great surface at a single view, deems them a dead level. But the ravines, made by the water courses through them, sufficiently indicate, that their swells and declinations communicate a quick motion to the waters, that fall on them. This is by far the most extensive class of prairies. These are the plains over which the buffaloes range. These are the plains, without wood or water, in which the traveller may wander for days, and see the horizon on every side sinking to contact with the grass.

The alluvial or wet prairies form the last and smallest division. They generally occur on the margins of the great water courses, although they are often found, with all their distinctive features, far from the point, where waters now run. They are generally basins, as regards the adjacent regions, and their outlines are marked by regular benches. They are for the most part of a black, deep, and very friable soil, and of exhaustless fertility. In the proper latitudes, they are the best soils for wheat and maize; but are ordinarily too tender and loamy for the cultivated grasses. They rear their own native grasses, of astonishing height and luxuriance. An exact account of the size and rankness of the weeds, flowering plants and grass on the richer alluvial prairies of Illinois and Missouri, would seem to those, who have not seen them, an

idle exaggeration. Still more than the rolling prairies, they impress the eye as a dead level; but they still have their slight inclinations towards their benches, where their waters are arrested, and carried off. But, from their immense amount of vegetation, and from the levelness of their surface, wherever they are considerably extensive, they have small ponds, plashees and bayous, which fill from the rivers, and from rains, and are only drained, during the intense heat of summer, by evaporation. These ponds in the alluvial prairies, that are connected with the rivers, when they overflow by bayous are filled, in the season of high waters, with fish of the various kinds. As the water subsides, and their connecting courses with the river become dry, the fish are taken by cart loads among the tall grass, where the water is three or four feet deep. When the waters evaporate, during the heats of summer, the fish die; and although thousands of buzzards prey upon them, they become a source of pollution to the atmosphere.—Hence these prairies, beautiful as they seem to the eye, and extraordinary as is their fertility, are very unfavorable positions, in point of salubrity. Flocks of deer are seen scouring across these rich plains, or feeding peaceably with the domestic cattle. In the spring and autumn, innumerable flocks of water fowls are seen wheeling their flight about the lakes and ponds of these prairies. They find copious pasture in the oily seeds of the plants and grasses, that have seeded during the summer.

During the months of vegetation, no adequate idea could be conveyed by description of the number, forms, varieties, scents and hues of the flowering plants, and the various flowers of the richer prairies. In the barrens are four or five varieties of 'ladies slippers', of different and the most splendid colors. The violets, and the humbler and more modest kinds of garden flowers, are not capable of competing with the rank growth of grass and weeds, that choke them on the surface. Some of the taller and hardier kinds of the liliaceous plants struggle for display, and rear themselves high enough to be seen. Most of the prairie flowers have tall and arrowy stems, and spiked or tassellated heads, and the flowers have great size, gaudiness and splendor, without much fragrance or delicacy. The most striking of these flowers we shall attempt to class and describe, in another place; only remarking here, that during the summer, the prairies present distinct successions of dominant hues, as the season advances. The prevalent color of the prairie flowers in spring, is blueish purple; in midsummer, red, with a considerable proportion of yellow. In autumn, the flowers are very large, many of them of the *helianthus* form, and the prairie receives from them such a splendid coloring of yellow, as almost to present to the imagination an immense surface of gilding.

MINERALS. There are diffused in the different positions of this valley the common proportions of minerals, oxides, neutral salts, fossils, and the different kinds of earths. Salt springs, as we shall have occasion elsewhere to remark, are found in a thousand places, in all proportions of saline impregnations, from water, that is merely brackish, to that which is much saltier than sea water. It is obvious to remark, the wise and benevolent provision of Providence for the population of the country, in thus providing, at such distances from the sea, an article so essential and indispensable to the comfort and subsistence of civilized man. Hence it results, that there is no point in this valley far removed from the means of an easy and cheap supply of this necessary article. The cattle have discovered this impregnation in innumerable licks. It is found in form like a hoar frost in 'Salt Prairies', between the Osage and the Arkansas. Arkansas and Red river are at times perceptibly brackish, from the quality of salt in solution in the water. Nitre is found almost pure, and is lixivated from the earths in the lime stone caves, that abound in various places. Muriate of magnesia, or Epsom salts, is found in caves in Indiana. Sulphates of iron and alumine are found in greater proportions, than in most countries; and copperas and alum might be among the manufactures of this region. Carbonate of lime abounds, as we have seen, every where. Sulphate of lime, or gypsum, is found in various places. We have seen most beautiful specimens, striated with needles in stars, and when pulverized and prepared, of a snowy whiteness,—said to have been brought from the Kansas of the Missouri. Quarries of gypsum are affirmed to exist on the upper waters of the Mississippi, in Tennessee, and in various other places. That call for the use of this material, which would alone lead to adequate search for it, has not yet been heard. It has not been required, or used in building, or the arts; and such is the universal fertility of the soil, that it will be long, before it will be sought after as a manure. But that time will come, and then, in this region of secondary formation, there can be no doubt, that a sufficiency of this article will be discovered for all the necessities of the country.

On the waters of the Little Sioux of the Missouri, and on a branch of the St. Peters of the upper Mississippi, is found a beautiful species of indurated clay,—constituting a stone of the most singular appearance, commonly called 'pipe stone', from the circumstance, that the savages in all these regions, quite to the western sea, make their pipes, and sometimes their other ornaments of it. It is said to be cut from the quarry, almost with the ease of wood. It hardens in the air, and receives an exquisite polish of impalpable smoothness. It is nearly of the color of blood; and is a beautiful article for monumental slabs, vases and requirements of that sort. If it be as abundant, and as easily procured, as has

been said, it will one day become an article of extensive use through the country. For although marble abounds, this is a more beautiful material, than any marble that we have seen. It has been generally asserted, that an imaginary line of truce extends round the places, where this stone is found, within which the most hostile tribes pursue their business of cutting out stones for pipes in peace.

We have seen frequent specimens of ores, said to be ores of cinabar. There are unquestionably, abundant ores of copper and zinc. Copper, it is known, is not found so abundantly on the shores of Lake Superior, as it was anticipated it would be. A vast number of specimens of copper ore are found in different points in this valley. Specimens of pure and malleable copper have been shown to us; one of which said to have been found in Illinois, thirty miles east of St. Louis, weighed three pounds. There is a river of the Upper Mississippi, forty miles above the mouth of the Missouri, called by the French, 'Cuivre' or Copper river, from the supposed mines of copper on its banks. Ores of copper have been found at different points on the Illinois. Considerable quantities are smelted at Galena, dug with the ores of lead. Iron ore is abundant in too many places to be named. Ores of antimony and manganese are occasionally seen; but the progress of the arts, and the circumstances of the country not having called for these articles, little note has been taken of the discoveries. Hunters and travellers have asserted, that gold dust is brought down to the Missouri by its upper waters, and has been seen on the sand bars at low water. Whether it be so, or whether the shining particles, which they undoubtedly saw, were only of mica or talc, is not known. On the ranges of the Rocky Mountains, continued in Mexico, it is well known the precious metals abound. A great many mines of silver are wrought on the western spurs of the Masserne Mountains, near Santa Fe. It is natural to infer, that the same ranges when thoroughly explored on the eastern side, in the vicinity of the sources of the Yellowtone, Platte, Arkansas, and Red Rivers, will be also found to have their mines of silver and gold. It is at present asserted, that a silver mine has been recently discovered in Indiana.

The only mines that are yet wrought in this country to any extent, are those of iron and lead. Near Pittsburgh, and on the Monongahela, in Ohio, Kentucky, Tennessee and Missouri, are manufactories of iron from native ores which we shall notice when we speak of those States. Lead ore is found in different points of this valley with more ease, and in greater abundance, perhaps, than in any other part in the world. The particular sections of country where these ores are dug in greatest abundance, are in the county of Washington in Missouri, from twenty to fifty miles west of the Mississippi, and the waters of Big Creek, a river of the Maramec;

and near Rock River, at Dubuque's mines, in the State of Illinois; and at Riviere du feve, improperly called Fever River, upon the Upper Mississippi. We shall naturally speak of the mines, when we treat of the states in which they are found.

CLIMATE. In a country of such immense extent, the climate must necessarily be various. We must, of course, be brief on so copious a head. Between the sources of the Mississippi and Missouri, and the Gulf of Mexico, there is every variety of temperature, from that of the Arctic regions, to that, where flourish the olive and the sugar cane. We may, perhaps, obtain conceptions of some exactness, by inspecting our thermometrical tables of the temperature at different points of the valley. We have resided through the season in the northern, middle and southern regions of it. We are confident, as a general fact, that the climate more exactly and uniformly corresponds to the latitude, than that of any other country. The amount of heat and cold, or the mean temperature through the year is greater or less, at any place, according as its position is more or less to the south. In ascending the Mississippi from New Orleans to St. Louis, or Cincinnati, in the spring, we take a direction generally north. One of the swifter steam boats will considerably out-travel the progress of spring; and from the region, where the foliage of the trees and vegetation generally have unfolded into all their verdure, we find the foliage on the banks of the river gradually diminishing, as we ascend; and after we pass the mouth of the Ohio, we shall perhaps, see the buds on the trees just beginning to swell. In descending the same river in the autumn, we observe this influence of the climate reversed in a most impressive manner. At Pittsburgh the trees are stripped of their leaves by frost. At Cincinnati nature is laying on the last mellow colors of autumn, and the leaves are beginning to fall. At Natchez the forests are still in the verdure of summer. We have noted this beautifully graduated and inverted scale of the seasons, more than once, in ascending and descending rivers.

It is very obvious why climate in this valley should so accurately correspond to latitude. It is an immense basin, spreading from north to south. There are no ranges of mountains spread across the valley in an eastern and western direction, to change the current or temperature of the winds, or to give a material difference of temperature to places, situated in the same latitude. Hence it is, that in traversing the country from south to north, we discover the diminution of temperature, as marked by that sensible and unerring thermometer, the vegetable creation, very accurately indicating the latitude of the place.

Mr. Jefferson has supposed, that in this valley the temperature is higher, than in the same parallels in the Atlantic country. Dr. Drake and others have successfully combated this idea. Mr. Jefferson asserts, that the reed cane, *myegia macrosperma*, and paroquets, are seen farther north on the Ohio and the Mississippi, than on the Atlantic shore. If it be so, the inference drawn from these facts, might easily be shown to be erroneous, by showing that their locality along these streams is fixed by other circumstances than temperature. On the Tennessee, the cane finding a congenial soil, and circumstances, on the banks of a river running from south to north, will spread its seeds along those banks to a point more northern, than its native residence. The immense numbers of paroquets, that are seen on the lower courses of the Mississippi, will naturally push their colonies far to the north on that river, where they still find all circumstances, but temperature, the same; where there are old, large and hollow sycamore trees, the favorite haunts of this brilliant bird, furnishing it at once food, shelter, and a home.

These regions, sheltered from the damp and cold northeastern gales of the Atlantic shores in the spring, will probably have that season milder and more forward, than in the corresponding latitudes of the Atlantic. But in such a vast basin, inclining from north to south, and permeated in its whole extent by such a river, as the Mississippi, an atmosphere of the cold air of the elevated regions of the table lands at its sources will naturally be set in motion at times by atmospheric changes, and be propelled towards the south. The colder air will often rush down to supply the vacuum, made by the rarefaction of southern temperature. Hence north and south winds,—in other words, winds up and down this basin, frequently alternate, and, together with their collateral winds, the northeast and southwest, are the prevailing winds felt in the valley. Southern and southwestern gales predominate in the summer, and northern and western in winter. Hence the winter is much more changeable, than that of the Atlantic country, frequently softening even in its northern parts, from weather, in which the mercury stands below zero, to weather of such mildness, as to invite people to sit at the open windows in January and February.

In the medial regions of this country, the winter commences about Christmas. The severest weather is ordinarily between that time and the second week in February. The common snows are from two to eight inches deep, and they seldom lie many days. We have, however, seen the snow at New Madrid, near 36° north, lie more than a fortnight. North of this mean region, as at Prairie du Chien, on the upper Mississippi, and the Council Bluffs, on the Missouri, that is to say, not far from the climate of New York and Albany, the snow does not fall as deep as at

those places or lie so long. The cold sometimes is severe, but oftener intermits, and is followed by mild, and even warm days.

We may class four distinct climates, between the sources and the outlet of the Mississippi. The first, commencing at its sources, and terminating at Prairie du Chien, corresponds pretty accurately to the climate between Montreal and Boston; with this difference, that the amount of snow falling in the former, is much less than in the latter region. The mean temperature of a year would be something higher on the Mississippi. The vegetables raised, the time of planting, and the modes of cultivating them, would, probably, be nearly the same. Vegetation will have nearly the same progress and periodical changes. The growing of gourd seed corn, which demands an increase of temperature over that requisite for the corn of the northern states, to bring it to maturity, is not planted in this region. The Irish potatoe is raised in this climate in the utmost perfection. Wheat and cultivated grasses succeed well. The apple and the pear tree require fostering, and southern exposure to bring fruit in perfection. The peach tree has still more the habits and the fragile delicacy of a southern stranger, and requires a sheltered declivity, with a southern exposure, to succeed at all. Five months in the year may be said to belong to the dominion of winter. For that length of time, the cattle require shelter in the severe weather, and the still waters remain frozen.

The next climate includes the opposite states of Missouri and Illinois, in their whole extent, or the country between 41° and 37° . Cattle, though much benefitted by sheltering, and often needing it, seldom receive it. It is not so favorable for cultivated grasses, as the preceding region. Gourd seed corn is the only kind extensively planted. The winter commences with January, and ends with the second week in February. The ice in the still waters, after that time thaws. Wheat, the inhabitant of a variety of climates, is at home, as a native, in this. The persimon and the pawpaw are found in its whole extent. It is the favored region of the apple, the pear, and the peach tree. Snows neither fall deep, nor lie long. The Irish potatoe succeeds to a certain extent, but not as well, as in the former climate; but this disadvantage is supplied by the sweet potatoe, which, though not at home in this climate, with a little care in the cultivation, flourishes. The increased temperature of March and April, and the subsequent grandeur of vegetation, indicate an approach towards a southern climate.

The next climate extends from 37° to 31° . Below 35° , in the rich alluvial soils, the apple tree begins to fail in bringing its fruit to perfection. We have never tasted apples worth eating, raised much below New Madrid. Cotton, between this point and 33° , is raised, in favorable positions,

for home consumption; but is seldom to be depended upon for a crop. Below 33° commences the proper climate for cotton, and it is the staple article of cultivation. Festoons of long moss hang from the trees, and darken the forests. The palmetto gives to the low alluvial grounds a grand and striking verdure. The muscadine grape, strongly designating climate, is first found here. Laurel trees become common in the forest, retaining their foliage and their verdure through the winter. Wheat is no longer seen, as an article of cultivation. The fig tree brings its fruit to full maturity.

Below this climate, to the gulf, is the region of the sugar cane and the sweet orange tree. It would be, if it were cultivated, the region of the olive. Snow is no longer seen to fall, except a few flakes in the coldest storms. The streams are never frozen. Winter is only marked by nights of white frosts, and days of north west winds, which seldom last longer than three days in succession, and are followed by south winds and warm days. The trees are generally in leaf by the middle of February, and always by the first of March. Bats are hovering in the air during the night. Fireflies are seen by the middle of February. Early in March, the forests are in blossom. The delightful white flowers of the *cornus florida*, and the brilliant red tufts of the Redbud, or *cercis canadensis*, are unfolded. The margins of the creeks and streams are perfumed with the meadow pink, or honeysuckle, yellow jessamine, and other fragrant flowers. During almost every night, a thunder storm occurs. Cotton and corn are planted from March to July. In these regions, the summers are uniformly hot, although there are days, when the mercury rises as high in New England, as in Louisiana. The heat, however, is more uniform and sustained, commences much earlier, and continues later. From February to September, thunder storms are common, often accompanied with severe thunder, and sometimes with gales, or tornadoes, in which the trees of the forest are prostrated in every direction, and the tract of country, which is covered with these fallen trees, is called a 'hurricane.' The depressing influence of the summer heat, results from its long continuance, and equal and unremitting tenor, rather than from the intensity of its ardor at any given time. It must, however, be admitted, that at all times, the unclouded radiance of the vertical sun of this climate is extremely oppressive. Such are the summers and autumns of the southern division of this valley.

The winters, in the whole extent of the country, are variable, passing rapidly from warm to cold, and the reverse. Near the Mississippi, and where there is little to vary the general direction of the winds, they ordinarily blow three or four days from the north. In the northern and middle regions, the consequence is cold weather, frost, more or less severe, and

perhaps storm, with snow and sleet. During these days, the rivers are covered with ice. The opposite breeze alternates. There is immediately a bland and relaxing feeling in the atmosphere. It becomes warm; and the redbirds sing in these days, in January and February, as far north as Prairie du Chien. These abrupt and frequent transitions can hardly fail to have an unfavorable influence upon health. From 40° to 36° the rivers almost invariably freeze, for a longer or shorter period, through the winter. At St. Louis on the Mississippi, and at Cincinnati on the Ohio, in nearly the same parallels, between 38° and 39° , the two rivers are sometimes capable of being crossed on the ice for eight weeks together.

Although the summers over all this valley must be admitted to be hot, yet the exemption of the country from mountains and impediments, to the free course of the winds, and the circumstance, that the greater proportion of the country has a surface bare of forests, and, probably, other unexplained atmospheric agents, concur to create, during the sultry months, almost a constant breeze. It thence happens, that the air on these wide prairies is rendered fresh, and the heats are tempered, in the same manner, as is felt on the ocean.

There is a circumstance, pertaining to vegetation in the middle and southern regions of this country, that we have not seen noticed by other writers, but which we have often remarked with surprise; and it is, that the same degree of heat in the spring does not advance vegetation as rapidly, as at the north. We have seen a brilliant sun, and felt the lassitude of the warm spring days continued in succession, and yet have remarked the buds to remain apparently stationary, and the developement of vegetation almost imperceptible. The same amount of heat at Quebec would have completely unfolded the foliage, and clothed the earth with verdure.*

DISEASES. A satisfactory account of the diseases of this valley would occupy more space, than we have to bestow upon the subject, and could only be expected in treatises, professedly devoted to medicine. General remarks upon the subject can only be expected here. In such a variety of climates and exposures—in a country alternately covered in one point with the thickest forests, and in another spreading out into grassy plains—in one section having a very dry, and in another a very humid atmosphere—and having every degree of temperature, from that of the Arctic regions, to that of the West Indies, there must necessarily be generated all the forms and varieties of disease, that spring simply from climate. Emigrants from the Atlantic country will always find it un-

* For table of climate see appendix, table No. I.

safe, to select their residence near stagnant waters and creeping bayous, on the rich and heavy timbered alluvions. Yet these, from their fertility, and the ease with which they are brought into cultivation, are the points most frequently selected. The rich plains of the Scioto were the graves of the first settlers. They have long since been brought into cultivation, and have lost their character for insalubrity. A thousand places in the West, which were selected as residences by the first immigrants, on account of their fertility, and which were at first regarded as haunts of disease and mortality, have now a character for salubrity.

On the lower courses of the Ohio, the Wabash, the Tennessee, the Mississippi, and its southern tributaries,—in short, wherever the bottoms are wide, the forests deep, the surface level, and sloping back from the river, the vegetation rank—wherever the rivers overflow, and leave stagnant waters, that are only carried off by evaporation—wherever there are ponds and lagoons in the bottoms, to catch and retain the rains and the overflow, it may be assumed, as a general maxim, that such positions will be unhealthy; and more or less so, as more or less of these circumstances concur. Wherever these causes of disease exist, there is no part of this valley, which has not a summer of sufficient heat and duration, to quicken these causes into fatal action.

The very rich and extensive alluvial prairies of the Upper Mississippi, and of the Illinois, which are covered with a prodigious growth of grass and weeds, generally contain marshy basins, small lakes and plashes, where the water from the bluffs and the highlands is caught and retained. They will ordinarily prove unhealthy,—some think, more so, than the timbered country,—until these reservoirs of stagnant waters are all drained, and the surplus vegetation is burned off, or otherwise removed by the progress of vegetation. These places strike the eye delightfully, and their openness, and exposure to be swept by the winds, seem to preclude them from the chance of sickliness. Their extraordinary fertility, and their being at once ready for the plough, hold out allurements to immigrants. But there appears to be in the great plan of Providence a scale, in which the advantages and disadvantages of human condition are balanced.—Where the lands are extremely fertile, it seems to be appended to them, as a drawback to that advantage, that they are generally sickly.

Immigrants have scarcely ever paused long enough, or taken sufficient elements into the calculation, in selecting their residence, with a view to its salubrity. When the choice is to be made, they are often encumbered with families, and generally feel stinted both in time and money, and are in a hurry to commence operations for the provision of their families. They are apt to give too little weight to the most important motive of

all, which ought to determine their election. A deep bottom, a fertile soil, a position on the margin of a boatable or navigable stream; these are apt to be the determining elements of their choice. The heavy forest is levelled. A thousand trees moulder about the cabin. The stagnant waters, that, while shielded from the action of the sun by the forest, had remained comparatively innocuous, exposed now to its burning rays, and rendered more deleterious by being filled with trunks and branches of decaying trees, and all kinds of putrid vegetation, become laboratories of miasm, and emit on every side, the seeds of disease.—When we know, that such have been precisely the circumstances, in which a great portion of the immigrants to the western country have fixed themselves in open cabins, that drink in the humid atmosphere of the night, through a hundred crevices, in a new and untried climate, under a higher temperature, under the influence of new diet and regimen, and, perhaps, under the depressing fatigue of severe labor and exposure; need we wonder, that the country has acquired a general character of unhealthiness?

There can be no doubt, that in the southern and middle regions of this valley, the wide, level and heavy timbered alluvions are intrinsically more or less unhealthy. It cannot be disguised, that in these situations, the new resident is subject to bilious complaints, to remitting fevers, and more than all, to intermitting fever, or fever and ague. This complaint is the general scourge of the valley.

It is an undoubted fact, explained in different ways, and by different theories, by the people, that even in the most unfavorable positions on the lower waters of the Ohio, or even the bayous of Arkansas, or Red River, the immigrant is not so much exposed, while his cabin is still under the shade of the unbroken forest. The most dangerous period is, after the trees have been levelled a year or two, and while they are still decaying about the dwelling. This well known fact would seem to give plausibility to the doctrine, that these deep and grand forests feed their foliage with an atmosphere, that is adverse to the life of man; and that when the forests are cleared away, the miasm, the noxious air, that used to be absorbed and devoured by the redundant vegetation and foliage of the forests, and incorporated with its growth, thus detached and disengaged, inhaled by the new residents, becomes a source of disease.

Another fact, in relation to the choice of a residence with a view to its salubrity, has been abundantly and unanswerably proved by experience. It is, that bluffs on the margins of wide bottoms and alluvial prairies are more unhealthy situations, than those, in the bottom or prairie, which they overlook. This fact has been amply demonstrated on the Ohio bottoms and bluffs, on the margins of the alluvial prairies of the Upper

Mississippi, and, in short, wherever a high bluff overlooks a wide bottom. The inhabitants of the airy and beautiful bluffs that bound the noble prairies of the Upper Mississippi, in an atmosphere, apparently so pure, as to preclude all causes of disease, are far more subject to fever and ague, than the people that inhabit below them on the level of the prairies. The same has been remarked of the Chickasaw bluffs, fort Pickering, or Memphis, fort Adams, Natchez, Baton Rouge, and the bluffs, generally, along the great water courses. Yet, though such is the uniform teaching of experience, so deceptive is the salubrious aspect of these airy hills, that swell above the dun and murky air, that seems to lie like a mist over the wide bottoms below them, that most people, in choosing their residence, will be guided by their senses, in opposition to their experience. We know not, whether the theory, by which this fact is explained, is a sound one or not. It is said that the miasm, or noxious air, from putrid vegetation, and stagnant water in the swamps and bottoms, is specifically lighter than atmospheric air; that, of course, it rises from the plains, and hovers over the summits of the bluffs, here finding its level of specific gravity; and that, were it colored, it would be seen overlaying the purer strata of air beneath it.

The slopes of the Alleghanies, the interior of Ohio and Kentucky, of Tennessee and Indiana, where the forest is cleared away, and the land has been for a sufficient time under cultivation, is sufficiently remote from stagnant waters—the high prairies of Illinois and Missouri—the dry pine woods of the lower and southern country—parts of the plains of Opelousas and Attakapas—considerable portions of Alabama and Mississippi—and, generally, the open country towards the Rocky Mountains, may be considered as healthy as any other country. As a general remark, the inhabitants of this valley are more subject to bilious complaints, than those of the northern and middle Atlantic states; but, probably, not so much so, as those on the sea board of the southern Atlantic states.—Bilious symptoms, especially in the southern regions, are apt to be combined with all forms of disease. Intermitting fevers are common through all the country, as they were even in New England, in the earlier stages of its settlement, and while it was still covered with forests. It is seldom a severe disease; and in most instances, readily yields to the universally established modes of treatment, by previous evacuations, and bark. Sometimes it becomes complicated with other diseases, and assumes a strongly bilious type; and it is then a formidable disease. It is a well known symptom of this disorder, that it recurs at regular intervals. When the links of the associated chain of disease are formed, if the disorder be cured, it is apt to recur again. All indisposition is apt to take this form; and it has this advantage in security against

other diseases, that when a person has been for a considerable time subject to ague, whatever form of disease may happen to assail him, it ultimately runs into the form of ague. But these agues, when often repeated, and long continued, gradually sap the constitution, and break down the powers of life. The person becomes enfeebled and dropsical. Marasmus, or, what is called 'cachexy,' ensues. A very common result is, that enlargement of the spleen, vulgarly called 'an ague cake.' This form of disease is most perceptible in the southern parts of the valley.

In the summer and autumnal months, bilious fevers are apt to prevail, probably to a greater extent, than in the Atlantic country. But it is believed, they more generally assume the remittent or intermittent form; that they are not so frequently attended with inflammatory symptoms, and that they more readily yield to medicine. The continued bilious fever of this country, as in other countries, is always a formidable disease. In the lower and southern country, in the heats of summer and autumn, when it prevails in towns and compact villages, it often assumes a malignant type. Prevention here, as elsewhere, is found to be better than remedy; and avoidances of exposure of night air, to rains, and the direct and continued influence of the sun, and strict temperance in eating and drinking, would no doubt, prevent many of these terrible diseases. Persons, especially, who are passing through the process of acclimation, ought not only to adopt this plan, but occasionally to take cathartics, followed by the use of bark.—The grand remedies of the western country, it is well known, are calomel and bark. We have no doubt, that the great quantities of calomel that are administered, equally by quacks and regular physicians, in adherence to a system, that has grown into a fashion, and which level all skill to the mechanical application of a certain number of grains of those medicines, will eventually yield to a more discriminating mode of practice. The present course of procedure is too often ruinous to the teeth, and even when the patient is cured, must tend to sap and break down the powers of life.

From the variable character of the winters, and from other causes, rheumatism is a common complaint. Severe colds and pneumonic affections are apt to prevail in the winter. There is but too much propriety in calling the two first months of autumn, in many places in the south, 'the sickly months.' But, as if to compensate for the prevalence of bilious affections, and the fever and ague, pulmonic consumption is a very uncommon disease, not often witnessed even in the northern regions of the country. Fifty persons fall victims to this terrible destroyer in the Atlantic country, to one, that dies of it here.

It is a very trite, but true and important remark, that in proportion as the country becomes opened, cultivated and peopled, in proportion as the

redundance and rankness of natural vegetation is replaced by that of cultivation, the country becomes more healthy. We shall naturally remark again on the peculiar features of disease, in particular sections of the country, when we treat of those sections. We shall only add in this place, that in the southern regions of this valley, the inhabitants are subject to a common and troublesome affection, called the 'bowel complaint.' It is particularly fatal to children. When it is prolonged to a chronic diarrhœa, it is sometimes fatal to adults. It is a very different complaint from that disorder which sometimes prevails in the Atlantic country, as a sweeping epidemic—the dysentery. The latter is an uncommon disorder in this region.

TREES AND SHRUBS. It will not be expected, that we shall dwell on this subject, in relation to this country, as professed naturalists. We propose only to take popular views of the subject, which, after all, we suspect, are best understood, most interesting, and most useful. We refer those, who wish to take more detailed and scientific views of this subject, to the writings of Bartram, Bradbury, Pursh, Michaux and Nuttall. The following is believed to be a tolerably ample and exact enumeration of the trees and shrubs, that are common to the Mississippi valley. The divisions of them according to climate, will occur in the account of the regions where they are found.

In forming this catalogue, we have had to encounter the common difficulty of selecting the Linnæan names from conflicting authorities. It belongs to the foppery of the easy assumption of science in botany, as in geology, that different authors either create, or adopt, different nomenclatures, as suits their fancy. We would prefer that nomenclature by which the trees and shrubs have been longest known. It may be, that there are trees and shrubs known in this valley, which are not included here. But it is believed, that few, if any, that are well or familiarly known, are omitted.*

As respects the divisions of these trees, that belong to particular climates, we may remark, that most of the oaks and hickories, and the cotton wood, are common to all the climates. The White, or Norwegian pine, is only found in the north, northwestern and northeastern regions. The cypress is not often found north of 36°. The long leaved pitch pine, and the laurel magnolia, are not often seen north of 33°. The live oak seldom extends north of 31°.

On the Alleghany, on the waters of the Upper Mississippi, between Rock River and the falls of St. Anthony, and in some places on the Illinois, the Weymouth, or Norwegian pine—the white pine of New England—is

* For table of trees, plants, &c. see appendix, table No II.

found in all its beauty and perfection. It no where has a larger and taller shaft, or a more beautiful verdure of foliage, than on the Alleghany; and it is from the banks of this distant stream, and from its waters in the state of New York, that New Orleans is supplied with white pine plank of the greatest clearness and beauty. On the Gasconade, the Ossage and the southern rivers of the Missouri, in the mine country in Missouri, and from that point, to the upper waters of White River, and across to the Arkansas, the common short leaved pitch pine is abundant. It is tall, straight, and of a fine size for the saw mill.

The cypress begins to be seen on the swampy and overflowed lands, near the mouth of the Ohio. It is, along with the swamp gum, the most common tree in the deep swamps from that point to the Gulf of Mexico. It is in every respect a striking and singular tree. Under its deep shade arise a hundred curiously-shaped knobs, called 'cypress knees.' They are regular, cone shaped protuberances, of different heights and circumferences, not unlike tall and taper circular bee hives. We have often remarked a very small cypress sprig, that had started from the apex of one of these cypress knees; and we believe, that it will ultimately be found that each one of the knees is the natural matrix of the tree. The tree itself always has a buttress, which has the exact appearance of an enlarged cypress knee.

The noble trees rear their straight columns from a large, cone shaped buttress, whose circumference at the ground is, perhaps, three times that of the regular shaft of the tree. This cone rises from six to ten feet with a regular and sharp taper, and from the apex of the cone towers the perpendicular column, with little taper, after it has left the cones from sixty to eighty feet clear shaft. Very near its top, it begins to throw out multitudes of horizontal branches, which interlace with those of the adjoining trees, and when bare of leaves, have an air of desolation and death, more easily felt than described. In the season of vegetation, the leaves are short, fine, and of a verdure so deep, as almost to seem brown, giving an indescribable air of funeral solemnity to this singular tree. A cypress forest, when viewed from the adjacent hills, with its numberless interlaced arms, covered with this dark brown foliage, has the aspect of a scaffolding of verdure in the air. It grows too, in deep and sickly swamps, the haunts of fever, musquitos, moccasin snakes, alligators, and all loathsome and ferocious animals, that congregate far from the abodes of man, and seem to make common cause with nature against him. The cypress loves the deepest, most gloomy, inaccessible and undated swamps; and south of 33°, is generally found covered with the sable festoons of long moss, hanging as it seems, a shroud of mourning wreaths almost to the ground. It seems to flourish best, where water

covers its roots for half the year. When it rises from eight or ten feet water of the overflow of rivers, the apex of its buttress is just on a level with the surface of the water. It is then, in many places, that they cut it. The negroes surround the tree in periogues and thus get at the trunk above the huge and hard buttress, and fall it with comparative ease. They cut off the straight shaft as suits their purpose, and float it to the raft, or the nearest high grounds. Unpromising, as are the places and the circumstances of its growth, no tree of the country, where it is found, is so extensively useful. It is free from knots, is easily wrought, and makes excellent planks, shingles, and timber of all sorts. It is very durable, and incomparably the most valuable tree in the southern country of this valley. It is a fortunate circumstance, that it inhabits the most gloomy and inaccessible regions, which will not come into cultivation for ages. It will of course have a better chance, not to share the fate of the most useful timber on the valuable uplands. The improvident axe soon renders timber difficult to be procured, in a country in the centre of forests. All the cypress forests, however, that are easily accessible, on the Lower Mississippi, and its tributaries, have been stripped of their timber by the Mississippi lumberers, who have floated to New Orleans millions of feet of this timber, from the lands of the United States, and who have already created a scarcity of this species on the margin of the Mississippi. There are, however, in the vast swamps of the Mississippi, Arkansas, Red River, and Florida, inexhaustible supplies of cypress still remaining.

The next most useful tree of this region are the oaks of which there are enumerated in this valley twelve varieties; and there are, probably more than that number. The most important of these is the upland white oak. It is a larger and handsomer tree, than in the Atlantic country; but is less firm, hard and durable. The same may be said of the swamp white oak, *quercus aquatica*, which grows of a prodigious height, size and beauty. There is the black oak, with large and small leaves; the yellow oak, and the post oak, growing on cold, level, wet and clayey lands. It receives its name from the durability of posts made of it in the ground. It is said to be the most durable timber of the oak kind in the upper country, for boat and ship building. The overcup oak receives its vulgar name from the size of the cups of its acorns. The Spanish, willow, red and black oaks, have nothing peculiar to distinguish them. The black-jack is a scrubby and small kind of oak, growing on plashy, and cold, level lands.

South of 31°, in the lower country along the coast of Florida, extending into the interior from sixty to a hundred miles, and along the shore of Louisiana, for half that depth, is the region of the live oak, *quercus*

semperirens. It is not a tall, but a spreading tree, with long lateral branches, looking at a distance, like an immense spread umbrella. It is a tree, extremely hard, compact, and difficult to cut; and when green, is so heavy, as to sink in the water. It is almost incorruptible. The islands on the shore of the gulf furnish this tree in abundance. It is so difficult to cut down, to burn, or otherwise clear from the soil, that in those islands, which have recently begun to be in request, as sugar lands, this tree, elsewhere considered so valuable for ship timber, is regarded as an incumbrance. It is valuable for its acorns, affording the finest range for swine. The value of this timber in ship building is well known.

There are enumerated in this country ten or twelve varieties of the hickory. More than half of these we have not seen in the Atlantic country. One of these varieties; *juglans amara, vel porcina*, pignut hickory, is loaded with a nut, whose shell is softer than an acorn, and the meat to the pressure of the fingers yields a copious oil, of use in the finer kinds of painting. It is acrid, and bitter to the taste.

The large walnut is a fruit of the size of a considerable apple, and is common in the middle regions of the valley.

The peccan is found far up the Mississippi and Illinois, and thence to the Gulf of Mexico. It is a tree of beautiful form and appearance, and the most useful of the whole class, except black walnut, for building and for rails. Its nut is long, cylindrical, and olive shaped; with a shell comparatively soft. The meat lies in two oblong lobes, is easily taken out entire, and excels all other nuts in delicacy of flavor. Unfortunately it soon becomes rancid, and is seldom carried to the Atlantic country in its original perfection.

Black locust, *acacia triacanthos*. This is a common and beautiful tree in the richer soils of the valley. It furnishes a durable and useful timber for rails, and other purposes, and is beginning to be much used in the construction of steam boats, and has been found both stronger and more durable, than any timber, that has been used for that purpose. The flowers of this tree yields an exquisite perfume.

The white flowering locust differs in no respect from that of the north.

The sugar maple is very abundant in the northern and middle regions of this valley. The process of obtaining sugar from the sap of this tree is sufficiently well known, and need not be here described. There are various districts, where an ample sufficiency of sugar might be made for the supply of a numerous population. In different parts of Ohio, Kentucky, Tennessee, Illinois and Missouri, it is made, not only for consumption, but for sale. The tree is of itself, apart from its uses, a most beautiful one. It is one of the first, that puts on the livery of spring. The

season of making it is generally one of festivity and high holiday. We have tasted loaf sugar refined from it, which could in no way be distinguished from that made from the cane. The cheapness of the latter kind, the abundance and excellence of its growth in the lower country, and the diminished expense of transporting it to the upper states, in consequence of the multiplication of steam boats, has diminished the demand for what is called 'country sugar,' and the manufacture of it has decreased, since the use of steam boats.

The black walnut, *juglans nigra*, is a splendid tree, and often grows to a great size. Its nuts resemble those of the white walnut, or what is called 'butter nut,' in the northern states. It is much used in the middle regions of the country, for ornamental finishing of houses, and cabinet furniture; and when rubbed with a weak solution of nitric acid, can be distinguished from mahogany only by an experienced eye.

The white walnut is abundant. An extract of the bark of this tree furnishes an useful and common cathartic.

The sycamore, *platanus occidentalis*, is the king of the western forests. It flourishes alike in every part of the valley, that we have seen. It is the largest tree of our woods, and rises in the most graceful forms, with vast, spreading, lateral branches covered with bark of a brilliant white. These hundred white arms of the sycamore, interlacing with the branches of the other forest trees, in the rich alluvion, where it delights to grow, add one of the distinguishing traits of grandeur and beauty to the forests. A tree of this kind, near Marietta, measured fifteen feet and a half in diameter.—We have seen one on the Big Miami, which we thought still larger. Judge Tucker, of Missouri, cut off a section of the hollow trunk of a sycamore, and applied a roof to it, and fitted it up for a study. It was regularly cylindrical, and when fitted up with a stove, and other arrangements made an ample and convenient apartment. We saw this gigantic section of a tree, conveyed on sleds prepared on purpose, and drawn by a sufficient number of oxen to its resting place. It is very common to observe this beautiful tree on the margin of rivers, from ten to fifteen feet in circumference.

The yellow poplar, *tulipifera liriodendron*, is a most splendid tree, and next in size to the sycamore. It rears into the air a shaft of prodigious height and size. It flowers with gaudy bell shaped cups, and the leaves are of beautiful forms. It is a very useful timber for plank and rails, and all the purposes of building, and splits with great ease.

The cotton wood, *populus deltoides*, is probably, more abundant on the lower courses of the Ohio, on the whole course of the Mississippi, Missouri, St Francis, White River, Arkansas, and Red River, than any other tree. It is a tree of the poplar class, and in appearance between

the balm of Gilead, and the Lombardy poplar. It is a noble and lofty forest tree, and sometimes vies with the sycamore itself for predominance in size and grandeur. It is of singular beauty, when its foliage is but partly unfolded in the spring. We have seen these trees, especially in the valley of Red River, twelve feet in diameter; and there are single trees that will make a thousand rails. When they are cut in the winter, the moment the axe penetrates the centre of the tree, there gushes out a stream of water, or sap; and a single tree will discharge gallons. On the sand bars and islands of the rivers, wherever the alluvial earth begins to deposit, there springs up a growth of cotton wood, the young trees standing so thick as to render it difficult for a bird to fly among them, and having, to a person passing at a little distance on the river, a singular appearance of regularity, as though they had been put out to ornament a pleasure ground. The popular name, 'cotton wood,' is derived from the circumstance, that soon after the foliage is unfolded, it flowers, and when the flowers fall, it scatters on the ground a downy matter exactly resembling short ginned cotton in feeling and appearance.

Catalpa. Some have undertaken to say that this is not a tree indigenous to the country. For our part, we have no question on the subject. We have seen, on the waters, near cape Girardeau, catalpas much older than the settlements of the whites in this valley. We have seen them, below the Chalk Banks on the eastern side of the Mississippi, of a very large size, and evidently of natural growth. It is a tree, beautiful from the great size and peculiar shape, and deep green of its foliage. When in blossom, its rounded top is a tuft of flowers of great beauty, and unequalled fragrance. One tree in full flower fills the atmosphere for a considerable circumference round it, with its delicious odors. For the gracefulness of its form, for the grandeur of its foliage, and the rich and ambrosial fragrance of its flowers, and for the length and various forms of its knife shaped, pendant seed capsules, two feet in length, we have seen no ornamental tree, which, in our view, equals the catalpa.

Magnolia grandiflora. Bartram, and others, by overrating the beauty of this tree, have caused, that when strangers first behold it, their estimation of it falls too low. It has been described as a very large tree. We have seen it in Florida, where Bartram saw it. We have seen it in its more congenial position for full developement, the rich alluvions of Louisiana; and we have never seen it compare with the sycamore, the cotton wood, or even the ash, in point of size. It is sometimes a tall tree, often graceful in form; but ordinarily a tree of fourth or fifth rate, in point of comparative size, in the forest where it grows. Its bark is smooth, whitish, very thick, and something resembles that of the beech. The wood is soft, and, for aught we know, useless. The leaves strongly

resemble those of the orange tree, except in being larger, thicker, and having a hoary, yellowish down upon their under side. The upper side has a perfect verdure, and a feel of smoothness, as if it were oiled. The flowers are large, of a pure white, nearest resembling the Northern Pond Lily, (*nymphaea odorata*), though not so beautiful; and are, ordinarily, about twice the size. The fragrance is, indeed, powerful, but rather offensive. We have felt, and we have heard others complain of feeling a sensation of faintness, in going into a room where the chimney place was filled with these flowers. The tree continues to put forth flowers for two months in succession, and seldom displays many at a time. We think few have been in the habit of examining flowering trees more attentively than ourselves, and we contemplated this tree for years, in the season of flowers. Instead of displaying, as has been represented, a cone of flowers, we have seldom seen a tree in flower which did not require some attention and closeness of inspection to discover where the flowers are situated among the leaves. We have not been led to believe that others possessed the sense of smell more acutely than ourselves. In advancing from points where these trees were not, to the pine forest, on the water courses of which they are abundant, we have been warned of our approach to them by the sense of smell, at a distance of something more than half a mile; and we question if any one ever perceived the fragrance much farther, except by the imagination. The magnolia is a striking tree, and an observer who saw it for the first time, would remark it as such.—But we have been unable to conceive whence the extravagant misconceptions, respecting the size, number, fragrance, and beauty of its flowers had their origin.

There are six or seven varieties among the laurels of the magnolia tribe, some of which have smaller flowers than those of the *grandiflora*, but much more delicate and agreeably fragrant. A beautiful evergreen of this class is covered, in autumn, with berries of intense blackness, and we remarked them in great numbers about St. Francisville. The holly is a well known and beautiful tree of this class. But that one which has struck us, as being the handsomest of the family, is the laurel almond, (*laurus cerasus vel Caroliniensis*.) It is not a large tree. Its leaves strongly resemble those of the peach: and it preserves a most pleasing green through the winter. Its flowers yield a delicious perfume. It grows in families of ten or fifteen trees in a cluster. Planters of taste in the valley of Red River, where it is common, select the place of their dwelling amidst a cluster of these trees.

Bois d'arc; maclura aurantica, bow wood, is a striking and beautiful tree, found on the upper courses of the Washita, the middle regions of Arkansas, and occasionally on the northern limits of Louisiana. It in

habits a very limited region; and we do not know, that it is a native elsewhere. It has large and beautiful leaves, in form and appearance between those of the orange tree and catalpa; and, taken altogether, is a tree of extraordinary beauty.—It bears a large fruit, of most inviting appearance, resembling a very large orange. Tempting as it is in aspect, it is the apple of Sodom to the taste. Most people consider it the most splendid of all forests trees. We never saw it in the flowering season. There is a solitary tree, growing in a garden in St. Louis. It was there sheltered by a wall; and we do not know, if it would flourish in a situation so northern, without protection of that kind. We remember to have seen one beautiful tree growing near Natchitoches, apparently native there. It is said there is no other within a distance of many miles. The wood is as yellow as that of fustic, and yields a similar dye. It is hard, heavy, durable, and so elastic, as to receive its French name from the circumstance, that all the southwestern savages use it for bows. It is thought to be a wood more incorruptible than live oak, mulberry, or even cedar. We were invited to visit the hulk of a steam boat, built above the Raft, on Red River, whose timbers were entirely of this wood.

China tree. This is a tree more cultivated in the southern regions of this valley, as an ornamental shade tree than any other. It has fine, long spiked leaves, eight or ten inches in length, set in corresponding pairs on each side of a stem two feet long. The verdure is of the most brilliant and deep shade in nature. In the flowering season, the top is one tuft of blossoms, in color and fragrance resembling the lilac, except that the tufts are larger. It holds in flower a long time. It is a tree of the most rapid growth of any known in our country. These trees planted out in a village, in a few years completely embower it; and from the intenseness of their verdure, they impart a delightful freshness to the landscape, in that sultry climate. After the leaves have fallen in autumn, the tree is still covered with a profusion of redish berries, of the size of haws, that give it the appearance at a little distance, of remaining in flower. Robins immigrate to this region in the latter part of winter, settle on these trees in great numbers, and feed on the berries. They possess an intoxicating, or narcotic quality; and the robins, sitting on the trees in a state of stupefaction, may be killed with a stick. The bark is said to be a powerful vermifuge.

Dog wood, *cornus florida*. Redbud, *cercis canadensis*. These are both of an intermediate size, between shrubs and trees. The former has a beautiful, heart shaped and crimped leaf, and an umbrella shaped top. It covers itself in spring with a profusion of brilliant white flowers, and in autumn with berries of a fine scarlet. The latter is the first shrub that is seen in blossom on the Ohio. It is then a complete surface of

blossoms, resembling those of the peach tree, and a stranger would take it at that time, to be that tree. The shrubs are dispersed every where in the woods; and in descending the Ohio early in the spring, these masses of brilliant flowers contrast delightfully with the general brown of the forest. The first time that the voyager descends this river, the redbud imparts a charm to the landscape, that he will never forget. These two are at once the most common and the most beautiful shrubs in the Mississippi valley. The dog wood, especially, is found every where, from Pittsburgh to the Gulf of Mexico; and, seen through the forests, in blossom, is far more conspicuous for its flowers than the magnolia. It has been asserted, that the dog wood belonged to the family of the quinquinas. Its bark is certainly a powerful restorative, in cases of the ague.

Pawpaw, *annona triloba*, *ficus Indicus*. This, in our view, is for beauty the prince of wild fruit-bearing shrubs. The leaves are long, of a rich appearance, and green, considerably resembling the smaller leaves of tobacco. The stem is straight, white, and of unrivalled beauty. In fact, we have seen no cultivated shrub so ornamental and graceful as the pawpaw. The fruit closely resembles a cucumber, having a more smooth and regular appearance. When ripe, it is of a rich yellow. There are generally from two to five in a cluster. A pawpaw shrub, hanging full of fruits, of a size and weight so disproportioned to the stem, and from under long and rich looking leaves of the same yellow with the ripened fruit, of an African luxuriance of growth, is to us one of the richest spectacles, that we have ever contemplated, in the array of the woods.—The fruit contains from two to six seeds, like those of the tamarind, except that they are double the size. The pulp of the fruit resembles egg custard in consistence and appearance. It has the same creamy feeling in the mouth, and unites the taste of eggs, cream, sugar and spice. It is a natural custard, too luscious for the relish of most people. The fruit is nutritious, and a great resource to the savages. So many whimsical and unexpected tastes are compounded in it, it is said, that a person of the most hypochondriac temperament relaxes to a smile when he tastes the pawpaw for the first time.

Persimon, *dyospyros Virginiana*. From the body of this tree, which resembles that of a hazard cherry, when pierced, exudes a copious gum, not unlike gum Arabic in appearance. The leaves resemble those of a wild black cherry. The fruit is of the size of a common horse plumb. When green, it is astonishingly astringent. It is only ripened by the frost of winter. There are varieties in its size, from low shrubs to considerable trees. When the small blue persimon is thoroughly ripened, it is even sweeter than the fig, and is a delicious fruit. If the best kinds

were cultivated, and purchased from beyond the seas, it would probably be much more known, and used, than it now is.

Wild plums. The Chickasaw plum is common from 34° to the Gulf of Mexico. It is found in the greatest abundance, and ripens early in June. Prairie plums are most abundant in Illinois and Missouri, on the hazle prairies. They are of various sizes and flavors. Their general color is redish, and their flavor tart. Some of them are large and delicious. For an experiment of the yield, two bushels were gathered from one tree. In places they are found in inconceivable quantities, the surface of acres being red with them. The yellow Osage plums of this class, when the better kinds are cultivated, are among the most delicious plums we have eaten. So rich and delightful a fruit, and so easily cultivated, well deserves to be transplanted to the Atlantic country.

Crab apple, *pyrus coronaria*. In the middle regions of the valley, on prairies of a particular description, there are great tracts covered with an impenetrable mat of crab apple shrubs. The form, color, and fragrance of the blossoms are precisely like the blossoms of the cultivated apple tree. When the southern breeze comes over a large tract of these shrubs in full blossom, it is charged with a concentrated fragrance almost too strong to be grateful. They are useful as stocks, in which the cultivated apple and pear may be engrafted. Their fruit, when properly prepared, makes the finest of cider; and the apple is much used as a preserve.

Mulberry. There are said to be two species in the country; the white and the black. We have never seen the white indigenous; but have so often heard it asserted to exist, as a native, that we are compelled to credit it. The common mulberry is the black, and it is found in every part of the valley that we have seen. In some places it constitutes no inconsiderable proportion of the timber. We have seen whole groves of small and young trees, apparently in the right stage to be useful for feeding the silk worm. Experience has demonstrated, that the worm thrives on these leaves, and that the product is of good quality. The wide diffusion, and the great prevalence of the mulberry, the general temperature of the valley, and the condition and habits of the people, clearly indicate to them, that this country ought to devote itself extensively to the making of silk.

In this country of forests, and where there are such numbers and varieties of trees, we might select many other interesting ones for description; perhaps some of them more so than those which we have here attempted to describe. The necessary brevity of our limits forbids our enlarging. From Michaux we learn that our trees are larger, taller, and more of them useful for timber, than those of Europe. The forest has a genera-

physognomy, an aspect of luxuriance, which discriminates it to the most superficial observer, from that on the other side of the mountains. We may add, that the varieties of trees of the same class appear to be more numerous. We apprehend, that most of the trees of that region are found here, while a number of the trees here are peculiar to this valley. Trees of the same class here are inferior to those that are there, for the same uses as timber. They are less tough, elastic, and durable. We may add, that the pine forests of the south contain countless millions of tall and straight pines, and would furnish, without sensible diminution, masts and spars for all the navies in the world.

VINES AND CREEPERS. The common grape vine, *vitis sylvestris*, is diffused through all the climates. Nothing is so familiar to the eye of a traveller in this country, as soon as he enters on the richer lands, as to see vines, often of a prodigious size, that are perpendicularly attached at the top branches, sixty or eighty feet from the ground, and at a great lateral distance from the trunk of the tree. It is a standing puzzle to a young man, first brought into these woods, to task his ingenuity, by putting to him to account for the manner in which a vine, perhaps nearly of the size of the human body, has been able to rear itself to such a height. There can be, however, no doubt, that the vine, in this case, is coeval with the tree; that the tree, as it grew, reared the vine, and that the vine receded from the trunk, with the projection of the lateral branches, until, in the lapse of time, this singular appearance is presented. In many places half the trees in a bottom are covered with these vines. In the deep forests, on the hills, in the barrens, in the hazle prairies, and in the pine woods, every form and size of the grape vine presents itself. We presume there is no scientific and complete description and arrangement of these vines. The most obvious popular division follows.

Winter grape, *vitis hyemalis*. This is the large vine that so generally clings to the trees in the alluvial forests. The leaves are large, and of a fine rich green, intermediate between the size of the leaves of the cultivated grape and the fox grape. They climb to the top of the highest trees of the forest. Probably not more than one in fifty of them bears any fruit at all. The fruit, when produced, is a small circular berry, not unlike the wild black cherry. It is austere, sour, and unpleasant, until it has been mellowed by the frosts of winter. But it is said, when fermented by those who have experience in the practice, to make a tolerable wine.

Summer grape, *vitis æstiva*. We have never seen it in deep bottoms. It is found on the rolling barrens, and the hazle prairies. It has a larger leaf than the former vine, and the wood of the vine is finely colored of

a blueish purple. The grape is more than twice the size of the winter grape, is ripe in the first month in autumn, and when matured under the full influence of the sun, is a pleasant fruit. It grows in the greatest abundance, but is too dry a grape to be pressed for wine.

June grape, *vitis vernalis*. This is a small, sweet grape, found on the islands of the Upper Mississippi, and Illinois, that ripens in June. We have seen the vine, but have never tasted the fruit. It is said to be the grape, of which the French, in the early periods of their establishment in this country, used to make wine. Various animals prey upon it, and it has almost disappeared from the country.

Parsley leaved water grape, *vitis aquatica*. We have never seen this vine in bearing.

Fox grape, *vitis riparia*. Is of the same size, form and quality with the same species on the east side of the mountains. It is not common.

Muscadine grape, *vitis verrucosa*. This vine strongly designates climate. It is seldom seen north of 34°. South of that it becomes abundant. It is found in the deep alluvial forests, clinging to the tall trees. The vine is smooth, of a fine olive green; and the leaves are smaller than those of the cultivated grape. The fruit grows in more sparse clusters than those of other grapes. Like other fruits, they fall as they ripen, and furnish a rich treat to bears, and other animals, that feed upon them. The grape is of the size of a plum, of a fine purple black, with a thick, tough skin, tasting not unlike the rind of an orange. The pulp is deliciously sweet, but is reputed unwholesome.

Pine woods grape. In ignorance of its proper designation, we shall call it *vitis humilior*, from its habit of creeping on the ground. It is agreed, that there are varieties of this fine grape, which, from the frequent burning of the pine woods, is becoming uncommon. It is surprising how little curiosity has been excited, even where it grows, by this rich fruit. It has a slender, blueish purple vine, that runs on the ground among the grass. It ripens in the month of June, is large, cone shaped, transparent, with four seeds, redish purple; and is a fine fruit for eating.

On the sandy plains, at the sources of Arkansas and Red River, the gentlemen of Long's expedition concur with hunters and travellers, in relating, that they found large tracts of sand plain, from which grew a grape which we infer from the description, to be of the same species as the pine woods grape. They have described the clusters to be large and delicious; and that the sand, drifting about them, covers up the redundant vegetation, performing the best operation of pruning on the vine. The sun, too, strongly reflected from a surface of sand, must have a powerful influence to mature them. It is possible, that some of the admiration

which has been felt, in seeing such sterile tracts covered with these abundant and rich clusters, and the high zest with which they were devoured, may have been owing to the surprise of finding such a phenomenon in contrast with a white and moving sand, and eating the fruit under associations created by hunger and thirst.

The universal diffusion of such numbers and varieties of the vine would seem to indicate this valley to possess a natural aptitude for the cultivation of the vine. It would be an experiment, it would appear, well worth the trial, to engraft, or bud every variety of the cultivated grape on the stocks of each of these native varieties. It is possible, that the exotics might thus be at once acclimated; and it is not unlikely that changes might be produced in them, favorable to their enduring the climate, and to their flavors and vinous properties.

Bignonia radicans is a creeper, beautiful for its foliage and flowers. It has a vine of a grayish white color, and long and delicate spike-shaped leaves, in alternate sets. It climbs the largest trees in preference, mounts to their summits, and displays a profusion of large trumpet-shaped flowers of flame color. Planted near a house, in two or three seasons a single vine will cover a roof, throwing its fibrous and parastic roots so strongly under the shingles as to detach them from the roof.

Ivy. There are varieties of this creeper. Every traveller in the rich alluvions has been impressed with the spectacles exhibited there, of the thousands of large and lofty columns of the cotton wood, wreathed from the ground to the branches, with an architectural drapery of this deep verdure. We have seen huge trunks of dead trees so ornamented. It is one of those charms of nature that never tire on the eye. It is thus that nature ornaments the pillars of her great temple, to fit it to inspire delight and adoration in the solitary worshiper.

Supple jack. We have first remarked this creeper in about latitude 35°. The vine resembles that of the muscadine grape; but the olive color is deeper. It is well known to attach itself so strongly to the shrub it entwines, as to cause those curious spiral curves and inner flattenings that give its singularity and value to the supple jack cane. The foliage of the vine is an exact copy, in miniature, of that of the China tree. The richness of its verdure, the impervious thickness of its dark green foliage, and the profusion of deep black berries, with which it is covered, would render it a beautiful creeper with which to cover a pavillion, or a piazza.

There is a creeper which we have not seen noticed by travellers or botanists, and which, indeed, we have not often seen ourselves, and then only on the margin of the Mississippi, between New Madrid and the mouth of the Arkansas. Its vine and foliage somewhat resemble

those of the supple jack. We never saw it climbing shrubs more than ten feet in height. The flowers were long and rich tufted wreaths on small, flexile, twiny stems and much resembling the purple blossoms of the pea. They were gathered for the garnishing of the chimney places of the cabins; and we have seen no flowers, that exceeded them in splendor and beauty.

The rich alluvial districts of the lower country of the Mississippi and its tributaries, are tangled with creepers of various kinds, foliage and forms. Some of them are annual, and some perennial. Many of them, as far as our knowledge extends, are non-descripts.

Cane, arundo gigantea, vel miegia macrosperma.—Some assert that the lower and bastard cane and the tall reed cane are the same species, and differ only in size and height. Others, and it is the prevalent opinion, assert, that they are varieties. Every one has seen this reed in the form in which it is used for angling rods. It grows on the lower courses of the Mississippi, Arkansas and Red River, from fifteen to thirty feet in height. We have seen some, in these rich soils, that would almost vie in size, with the bambop. The leaves are of a beautiful green—long, narrow and dagger-shaped, not unlike those of Egyptian millet. It grows in equidistant joints, perfectly straight, almost a compact mass; and to us, in winter especially, is the richest looking vegetation that we have ever seen. The smallest sparrow would find it difficult to fly among it; and to see its ten thousand stems, rising almost contiguous to each other, and to look at the impervious roof of verdure, which it forms at its top, it has the aspect of being a solid layer of vegetation. A man could not make three miles in a day through a thick cane brake. It is the chosen resort of bears and panthers, which break it down, and make their way into it, as a retreat from man. It indicates a dry soil, above the inundation, and of the richest character. The ground is never in better preparation for maize, than after this prodigious mass of vegetation is first cut down, and burned. When the cane has been cut, and is so dried, as that it will burn, it is an amusement of holiday to the negroes, to set fire to a cane brake, thus prepared. The rarefied air in the hollow compartments of the cane bursts them with a report, not much inferior to a discharge of musquetry; and the burning of a cane brake makes a noise as of a conflicting army, in which thousands of muskets are continually discharging. This beautiful vegetable is generally asserted to have a life of five years, at the end of which period, if it has grown undisturbed, it produces an abundant crop of seed, with heads very like those of broom corn. The seeds are farinaceous, and said to be not much inferior to wheat, for which the Indians, and occasionally the first settlers, have substituted it. No prospect so impressively shows the exuberant prodigality of nature, as a thick cane

brake. Nothing affords such a rich and perennial range for cattle, sheep and horses. The butter that is made from the cane pastures of this region, is of the finest kind. The seed easily vegetates in any rich soil. It rises from the ground, like the richest asparagus, with a large succulent stem; and it grows six feet high, before this succulency and tenderness harden to wood. No other vegetable furnishes a fodder so rich, or abundant; nor, in our view, does any other agricultural project so strongly call for a trial, as the annual sowing of cane, in regions too far north for it to survive the winter. We suppose this would be in latitude 39°.

Gooseberry. All its varieties are seen indigenous in all parts of this valley. It grows to a great height and size in the middle regions, and covers itself with fruit. We have seen in Missouri a gooseberry hedge, of a height, compactness and thorny imperviousness, to turn all kinds of cattle. It would have the advantage of attaining its full size in three or four years.

Privet. This beautiful ornamental shrub, too well known to need description, is indigenous to various parts of the valley. When clipped, it forms a compact wall of verdure, like the box, used for the same purpose at the north.

Hazle bush. Immense tracts of the prairies are covered with this bush; and the nuts are fine and abundant.

The whortleberry is not so common, as in the Atlantic country; but, where it does grow, is of great size. It is found in great abundance, and in full perfection, at the bases of the flint knobs, in the St. Francis country, and along the upper courses of White River.

We have seldom seen the red raspberry; but it is said to grow of fine size and flavor, from the middle to the northern regions of this valley.

Blackberries, high and creeping, are found in prodigious abundance, from the north to the south.

The prairies, in many places, in the season, are red with fine strawberries.

For the rest, the fruit bearing shrubs and plants do not materially differ from those of the Atlantic country. With the exception of the strawberry and blackberry, they are not so common here as there.

HERBS, GRASSES, AND FLOWERING PLANTS. The universal, indigenous grass of this country, in all its climates and extent, covering the millions of acres of the prairies, is what is commonly called prairie grass, *poa pratensis*. It grows equally in the forests and barrens, wherever there is an interval, sufficiently unshaded to admit its growth.—It is tall, coarse, and full of seed at the top; and when ripe it is rather too wiry for fodder. It is cut for that purpose in September. If it were cut

earlier, and before it had lost its succulence and tenderness, it would, probably, be excellent fodder. As it is, the prairies yield inexhaustible quantities; and the towns and villages in the prairie regions are copiously supplied. When young, and before it has thrown up its stems, it resembles wheat in appearance. We have seen cattle, turned into the wheat fields in the spring, to eat down the redundant growth of wheat, feed on the grass along the margins of the fields, in preference to the wheat.

The only grass that yields a fine, soft sward, is called blue grass, and is not unlike the common-spear grass of New England. We are not satisfied, whether it be indigenous, or not. We have constantly observed it growing about deserted houses, and Indian villages. On the upper prairies of Illinois, it is said in many places to be displacing the prairie grass. It seems to be, like the robin-redbreast, attached to the abodes of civilized man.

We have recently read, that in the wet prairies of Illinois and Indiana, the fowl meadow grass of New England was growing in abundance. Whether this be fact, or not, whoever would introduce this valuable grass to notice in the wet prairies of the West, would be a benefactor to that region.

The rush, *equisetum hyemale*, grows on bottoms, in grounds of an intermediate elevation between those of the cane brake and the deep overflow. It is found; of a humbler growth, quite to the sources of the Mississippi. But it finds its full developement between 30° and 33°. We have travelled among this grass, a perfect mat, as high as the shoulders. Nothing can exceed the brilliance of its verdure, especially when seen in winter, in contrast with the universal brown. When it grows high and thick, it is difficult to make way through it; and it has a disagreeable kind of rustling, which produces the sensation, that is called setting the teeth on edge. In northern regions its tubular stock is apt to fill with compact icicles. It is well known to be the favorite range of horses and cattle, and is devoured by them with more greediness, than even cane. When filled with ice, and thus swallowed, it produces a chill in the stomach of the cattle, that is apt to prove fatal. To the cattle and horse boats, that descend the Mississippi, it is an invaluable resource. The cattle and horses, pent up and immovable in these floating barns, for many days in succession, are turned loose, and find holiday pasture in this rich range.

Pea vine. This is a small, fibrous vine, that covers the soil in the richer forest lands. It receives its name from the resemblance of its leaves and flowers to those of the cultivated pea. It is a rich and almost universal forest range for cattle; but when once eaten down, is not apt

to renew itself. Of course, it disappears in the vicinity of compact population.

Swamp grass. This grass is found in low, wet and miry swamps, on hassocks elevated above the water. It is of the brightest verdure, remaining green through the frosts of winter. It seems to be the same grass, which grows in boggy meadows in New England. Its sharp edges, when drawn rapidly through the fingers, cut them. In the middle regions of the valley, cattle are driven to these swamps, to subsist through the winter.

• **Wild rice, *zizania aquatica*, vel *fatuis arena*.** By the French, *folles avoines*. By the Indians, *menomene*. It is found in the greatest abundance on the marshy margins of the northern lakes, and in the plashy waters on the upper courses of the Mississippi. It grows in those regions on a vast extent of country. It is there, that the millions of migrating water fowls fatten, before they take their autumnal migration to the south. It is there, too, that the northern savages, and the Canadian traders and hunters, find their annual supplies of grain. But for this resource, they could hardly exist. It is a tall, tubular, reedy, water plant, not unlike the bastard cane of the southern countries. It very accurately resembles the cane grass of the swamps and savannas on the Gulf of Mexico. It springs up from waters of six or seven feet in depth, where the bottom is soft and muddy. It rises nearly as high above the water. Its leaves and spikes, though much larger, resemble those of oats, from which the French give it its name. Its culm is jointed, as large as the little finger; leaves broad, and linear, panicle more than a foot in length; the lower branches with spreading barren flowers, the upper with fertile and erect ones. The seeds are blackish, smooth, narrow, cylindrical, about three quarters of an inch long, deciduous. It is said to have been discovered in the brooks of Massachusetts. When it is intended to be preserved for grain, the spikes are bound together, to preserve them from the ravages of birds and water fowls, that prey upon them in immense numbers. It thus has a chance to ripen. At the season for gathering it, canoes are rowed among the grain. A blanket is spread upon them, and the grain is beaten upon the blankets. It is, perhaps, of all the *cerealia*, except the maize, the most prolific. It is astonishing, amidst all our eager and multiplied agricultural researches, that so little attention has been bestowed upon this interesting and valuable grain. It has scarcely been known, except by Canadian hunters and savages, that such a grain, the resource of a vast extent of country, existed. It surely ought to be ascertained if the drowned lands of the Atlantic country, and the immense marshes and stagnant lakes of the south, will grow it. It is a mistake, that it is found only in the northern regions of this valley. It grows in

perfection on the lakes about Natchitoches, south of 32°; and might probably, be cultivated in all climates of the valley. Though a hardy plant, it is subject to some of the accidents, that cause failure of the other grains. The grain has a long slender hull, much resembling that of oats, except that it is longer and darker. In detaching this hull, the Indians use a process of drying, that probably in most instances destroys its germinating principle. Those who have found this grain unpleasant have perhaps eaten it when smoked and badly prepared. There is, probably, the same difference in quality, too, as in other grains. The grain that we have eaten, was as white as the common rice. Puddings made of it tasted to us like those made of sago.

Palmetto, *chemerops latanier*. This is a perennial plant, strongly marking climate. It commences in the same regions with long moss—that is to say about 33°. It throws up from a large root, so tough as to be cut with difficulty by an axe, and hard to be eradicated from the soil, large, fan-shaped palms, of the most striking and vivid verdure, and ribbed with wonderful exactness. It indicates a deep swampy soil, and grows six feet in height. The infallible index of swampy and southern climate, and having no resemblance to any plant seen at the north, its foreign aspect and its deep green, unchanged by winter, when first seen by the immigrant from the north, with a surprise connected with rather unpleasant associations, strongly reminds him that he is a stranger and in a new country. It is used by the savages, and the poorer creoles, as thatch for their cabins; and from the tender shoots of the season, properly prepared, a very useful kind of summer hats, called palmetto hats, are manufactured.

MEDICINAL PLANTS. On this head, but little is yet known of this country; and that little, except the most obvious points, falls within the proper limits of description by a physician. In a climate so various,—a soil so prolific,—and a Flora so immense as that of the prairies, where such an infinite variety of plants and flowers is renewed, and perishes every season,—and in a country so fresh, it may be readily conceived, that the medicinal properties of but very few of the plants have been sufficiently experimented. Most of the medicinal plants of the Atlantic country are found here; and many that are peculiar to this region.

Varieties of the hop are natives of the country; and the hazle prairies have their clumps of hazle bushes often surmounted with the beautiful wreathings of the clusters of the common hop.

Virginia snake root; a species of ipecacuanna, called 'Indian physic,' American columbo; *frascra Caroliniensis*, a plant growing six feet high, and covering itself with brilliant flowers; thoroughwort, *upatorium per-*

foliatum; ginseng; all the varieties of the mints; blood root, *sanguinaria canadensis*;—these plants are common, and widely diffused.

May apple, *podophyllum peltatum*, is a beautiful plant, that completely covers the ground where it grows, with the freshest and most cheering verdure of spring. It has a handsome white blossom, and bears a fruit of the appearance and taste of a lemon. Its root is a powerful cathartic, and has been successfully introduced into medicine as a substitute for jalap.

Seneka, *polygala seneca*; American senna, *cassia, marilandica*; poke weed, *phytolacca decandria*; Oswego tea, *monarda kalminiana*; poison sumach, *rhus vernix*; *solanum nigrum*, or nightshade; wake robin, *trillium cernuum*; golden rod, *solidago odora*; mistletoe, *viscum album*; horehound, &c. are common.

Strammony, *stramonium datura*, a poisonous weed, perniciously common through the western country. On the richest bottoms it grows fifteen feet in height, and of a size and compactness to prevent cattle from running among it. It has splendid flowers, and a great quantity of oily seeds. Its smell is nauseous; and it is a common and annoying tenant of the villages on the alluvial margins of rivers. In some places no inconsiderable part of the labor on the highways is to cut up this weed from the roads and outlots of the villages. Its popular name is jimson, probably a corruption of Jamestown, the place whence it is said to have been brought. It is used in medicine in spasmodic asthma.

The next most common and annoying weed along the roads, especially in Louisiana, is a very tall plant, resembling *cassia marilandica*. It renders the paths, and the banks of the bayous in that region almost impassable in autumn, until the cattle have trodled it down.

Cockle burs, in the same situations, are excessively annoying weeds, filling the outlots, and uncultivated places to such a degree that the burrs attach to the clothes of passengers, and mat the wool of sheep running among them with an inextricable tangle.

Virginia snake root, *aristolochia serpentaria*, wormwood, *artemesia*, all the varieties; southern wood; wormseed; wild horehound, *eupatorium pilosum*; black henbane, *hyoscyamus nigra*; deadly nightshade, *atropa belladonna*; Indian tobacco, *lobelia inflata*; white horehound, *marrubium vulgare*; balm, *melissa officinalis*; among the mints, pennyroyal, *mentha pulegium*, growing to a great size; sarsaparilla, *smilax*; Carolina pink, *spigelia marilandica*; common nettle, *urtica*, every where annoying to the summer traveller in the woods; *valerian officinalis*, common on the Ohio; gentian; all the species of the violets; prairie wax weed, common in the prairies, from four to six feet high, when perforated exuding a yellow terebenthine wax of aromatic smell, and to which many virtues are ascribed by the settlers.

*The medical plants which the Western Country has in common with other countries, possess the same virtue, under variations from climate and local circumstances; the too common opinion of their inferiority will often be changed by a fair trial. Different species also promise a reward of examination from the generic similarities; when these are actually in use among the people of the country, the probability of their value is the greater.

An application of these principles will bring the following plants to particular notice: agrimony, *potentilla quinquefolium*, *polygonum bistorta*, gentiana, fumaria, angelica, cochlearia, *erysimum officinale*, arum, *sympitum*, inula campana, asarum, all grow in the northern and middle states, and are the same with or near a kin to those classed among the best simples by Dr. Cullen in his *Materia Medica*. The gentiana growing in the glades of Pennsylvania, is by Dr. Schoeph esteemed the best of their several species. The arum is generally called Indian turnip, from its ancient value among the Indians, and often used with other ingredients by the country people in that general debility consequent on tedious fevers. The best recommended remedies against intermittent fevers are cornus *florida*, dogwood; quercus *phellos*, live oak; persimon, *lonicera symphoricarpos*; by their barks; pyrola *maculata*, with the Indian name *pipisiseva*; sambucus *Canadensis*; laurus *astivalis*, spice wood, Benjamin tree, benzoin. The first is more generally known; a decoction of the bark has, in many cases, been effectual; it is by some deemed equal, when fresh, to the Peruvian. The second is much valued in the south, its native place; that of persimon in North Carolina and of *lonicera symphoricarpos* in Virginia. An infusion of the plant, pyrola *maculata* has been frequently used for some years in Pennsylvania, under the name of *pipisiseva*. The sambucus *Canadensis*, red berry elder, is by the Indians called the *fever-bush*; a decoction of its wood and buds being of ancient renown among them. The laurus *astivalis* spice-wood, Benjamin tree, is also distinguished with that name by the people in the northern parts, for the salutary decoction of its wood and leaves. The bark of the liriodendron, *tulip tree*, is also very generally esteemed a good substitute for the Peruvian, especially that of the root. We may observe on these and other febrifuges, that the variety probably corresponds with the diversity of the fevers, which is very considerable from latitude, season, and personal constitution: thus, for example, the above spice-wood is of peculiar benefit in that moderate but tedious kind called *slow fever*, which is almost continual.

Against rheumatism these are worthy of trial: the root, in decoction, of aralia *spinosa*, angelica tree; the cones of pinus *strobus*, white pine;

the twigs and roots of magnolia *glauca*, swamp sassafras, both in decoction and bath; the fresh bark of *juglans alba*, hickory applied externally is much used by the Indians.

Dysentery has been cured by the bark and gum of liquidambar styraciflua, sweet gum; cynoglossum *Virginianum*, foliis amplexicaulibus ovatis, hound's tongue; triosteum *angustifolium*, floribus oppositis pedunculatis; the root of white oak in powder.

Antidropsical, well recommended, are the leaves of calicarpa *Americana*; the root, in decoction, of aralia *nudicaulis*, foliis binis ternatis; that of sassafras in extract.

Cholic is removed by the oil of the above spice-wood berries; the flatulent and hysteric kinds, eminently so by angelica *lucida*; foliolis æqualibus ovatis inciso-serratis.

The best among pleuritic remedies must be the *pleurisy root*, so much extolled in Pennsylvania, described by Schoepb *asclepias tuberosa*, foliis alternis lanceolatis, caule divaricato piloso; another *asclepias*, bears a high value, called also *butterfly root*; the *asclepias decumbens*, *pleurisy root*, mentioned by Mr. Jefferson in his *Notes on Virginia*, must be one of these. The bark and berries of the above magnolia, either in decoction, or infusion of spirituous liquors, is generally salutary in those great *colds* which affect the sides, back and breast with painful *stiches*, attended with febrile chills and general langour.

Anthelmintics are the chenopodium, and the spigelia *Marylandica*, caule tetragono, foliis omnibus oppositis. Carolina pink, a southern plant, will destroy the worms, but caution in the dose is requisite.

Spiræa trifoliata, foliis ternatis serratis subæqualibus, floribus subpaniculatis, ipecacuanha, Indian physic, is an effectual and safe emetic. Podophyllum *peltatum*, foliis peltatis palmatis, May apple, is lately coming into practice as a laxative by an extract of the root that removes its emetic quality. Convolvulus *panduratus* grows in the middle latitudes; and in the south some species similar to the convolvulus jalappa, not well explored.

Ulcers and cancerous sores are frequent among those whose humours are vitiated by perennial fevers; in a variety of remedies these deserve notice: iris *versicolor*, ashes of magnolia, *glauca*, in form of plaster, and a strong bath of sassafras root, have cured ulcerated legs. The root of *saururus cernuus*, foliis cordatis petiolatis, amentis solitariis recurvis, *lizard-tail*, bruised and applied as a poultice to sore and impostumate breasts will ripen and heal them. A species of nigella, called *gold thread*. Indian *mouth root*, is an excellent remedy for an ulcerous mouth. A species of geum, *water avens*, *throat root*, *cure all*, is an esteemed remedy for ulcerated sore throat; a decoction of the root is both a gargle

and drink. *Rumex acetosella*, floribus dioicis, foliis lanceolato-hastatis, *sour dock*, *cancer root*, is recommended against inveterate ring-worms; this is biennis and found over the whole country: the juice is mixed with vinegar. The *phytolacca decandra*, floribus decaudris decagynis, *poke*, has of late given promising experiments in the cure of cancers; the juice of the berries is inspissated by the sun; the young sprouts in spring are eaten as asparagus, but grown too far they are violently cathartic.

Preservatives against venomous snakes seem to be scattered over the whole country, and they merit full investigation, in order to provide prompt remedies, in every place, and against different kinds of serpents, especially in new settlements. *Convolvulus purpureus*, *purple bind-weed*, is very powerful, if it is true that the Indians can handle rattle-snakes after anointing their hands with its juice, as Catesby relates; this grows in the south. A species of *jussie* is mentioned in the cited memoirs, as growing in the northern countries near the haunts of rattle-snakes, called rattle-snake plantain. The *hieracium venosum*, foliis cuneiformibus hirtis, scapo nudo crassissimo erecto, grows from the north to the south inclusively; is called poor Robin's plantain, and said to cure the bite both of the rattle-snake and of his supposed precursor the pilot-snake. *Erigeron*, likewise called Robert's plantain, is described by Dr. Schoeph thus, "radix repens; folia radicalia ovata, basi attenuata, dentata dentibus paucis a medio ad apicem glanduliferis, obtusa, pilosa, venis paucis Scapus biuncialis, pedalis, striatus, villosus, uniflorus, &c. &c." Dr. Otto, a respectable practitioner, informs that the herb ought to be given in a plentiful decoction, and also applied with the root to the wound. The herb of *olidago virga aurea*, golden rod, is used in the same manner. The root of *aletris farinosa* as taken in powder, or brnised and steeped in liquor; this root is called star-root, blazing star, devil's bit, and greatly esteemed both by Indians and the people of several states for many qualities. The *polygala Senega* is well know. The plantain of Negro Cæsar we just mention, with a wish that an authentic account could be obtained of the experiments for which he obtained a public reward. Many credible testimonies agree in the fact, that the Indians have extraordinary skill in curing the bites of serpents; but whether any specific antidote is known appears doubtful: the plants in use act, however, as powerful sudorifics and absorbents; a narrative on this subject, would here be too prolix for our plan.

The *swertia difformis* has been recommended in canine madness.

In the search of new medicines, spiëy trees and balmy evergreens are particularly inviting. The swamps of the low country abound in plants of aromatic scent; the *magnolia glanca*, so frequent in them seems to

hold out her fragrant lilies and crimson berries to the skeleton-prey of Stygian vapours; probably her sisters are also compassionate to the same sufferers.

Indigenous esculents claim attention in several views. Those roots, herbs, grains and barks, that in case of need can support life may be useful to travellers in the wilderness, and to troops that carry on an Indian war; the savages make this use of the inner bark of the elm and the roots of *aralia nudicaulis*. The sallads of many kinds, gathered in divers parts of the country during spring, should be generally known. Several wild fruits might be improved by culture, as wal nuts, crab-apples, papaws, *annona*, plums, grapes, persimons, honey-locust, *gleditsia triacanthos*; some persons have planted orchards of this and made plenty of metheglin from the sweet pods. While the sugar maple is of late justly valued, its kindred also merit more attention: we are credibly informed, that in Canada equally good sugar is made from the weaker juice of the red maple, a tree that abounds through all the states. The chesnut oak is said by Schoepb to yield in spring a copious agreeable drink; other trees may have similar saps. Aromatic plants deserve notice: the barks of young sassafras and of *calycanthus floridus*, much resemble cinnamon the *acorus calamus* is used in the west. The plants used as tea in divers parts deserve examination: the *cassine*, called South Sea tea tree, is obscurely known, but has long been famous among the Indians.

Many vegetable dyes are already in use, both among the Indians and the inhabitants; some of them are also recorded by writers, but a collection of scattered practice, and a selection of the best in every kind, are yet wanted. In this branch, the practice of other countries may also be adopted: thus the *rhys toxicodendron vernix*, varnish tree, poison ash, is probably the same with the valuable species of Japan.

Saps, roots, leaves, flowers, barks, may be useful in a variety of modes; for example—The roots of *æsculus pavia*, *scarlet horse chesnut*, and of *jucca filamentosa*, *silk grass*, are used for soap; chesnuds can be prepared for the same use. The two kinds of *myrica*, candle berry myrtle, are known; the *melia azedarach* grows in the south, under the name of *bead tree*, but its berries are not yet in use for tallow, as in Japan. The *asclepias*, *silk-weed*, has a fine white down in its pods, which in Massachusetts is carded and spun into very good wick-yarn. White oaks abound, an extract of their barks might, as an article in tanning, be a valuable export.

Vegetable medicines for cattle are very interesting; a critical comparison of European treatises, with what is written and practised in America will point out the best.

The beauties of the American flora are yet displayed only to those admirers, who have sought them, in fields and woods from spring to autumn, in northern and southern climes, in the grand magniflora and the humble lily of the valley. Many of the wild flowers would adorn gardens, and embellish groves and meadows: but a great part of these are known only in their native places; and some have not even obtained a vernacular name. Flowery shrubs are gradually coming into more notice; and some of the finest will endure the winter of Pennsylvania; the *chionanthus*, *snow drop*, *fringe tree*, *calycanthus floridus*, *bignonia radicans*, *trumpet flower*, and the beautiful *Franklinia*, all grow well near Philadelphia. Several of the trees most agreeable by foliage, bloom, or lofty growth, have a spontaneous wide range, and others will, under a skilful hand, pass their natural limits."

We could easily swell this catalogue with the names of a hundred other plants to which various and powerful medicinal virtues are ascribed by the people. We could add to it the herbs which are cultivated, as medicinal.—We have merely attempted a brief outline of the most common indigenous medicinal plants of the valley. Almost every family has its *panaceum*, in some herb or plant, which that family has exclusively experimented. A rich harvest for experiment is yet reserved for the scientific botanist and physician.

One flowering shrub, the glory of the vallies and declivities of the Alleghanies, we ought not to omit. It is a species of laurel, growing in company with the lares humilior, or sheep's bane, but possessing a larger and more beautiful foliage. It grows in large clumps, with exquisitely formed leaves and stems, and covers thousands of acres of the richer slopes and brook sides in the darkest forests of the Alleghanies. It is in full flower in mid-summer; and whoever has passed their wide ranges at that season, has seen in these mountain solitudes a profusion of large clusters of these splendid flowers, surpassing all comparison with the most beautiful flower garden, and showing great extents of these dark and elevated regions, a wilderness of blossoms, filling the mind with admiring views of the lonely magnificence of nature.

The common kinds of aquatic plants are found in the still and shallow waters of the swamps; particularly a beautiful kind of water lily, highly fragrant, and bearing no resemblance to the *nympha odorata*, which we have not seen here, but which is said to be found in the northern regions of the valley. A singular kind of aquatic vegetation, which has given rise to the fiction of floating islands of vegetation on these waters, is seen to cover great extents of shallow lakes and muddy bayous. It appears, indeed, to float on the water; and great masses of it, no doubt, often are detached, and seen floating, as though there were no roots

attached to the soil at the bottom. But we have examined it, and found its twiny stem of many yards in length, bound to the bottom by a thousand fibrous roots. It has a small, beautiful, elliptical leaf, and a diminutive, but delicate white flower. We have sailed, when the bow of the vessel made a furrow through fields of this curious plant. Under them fishes dart, alligators gambol, and in the proper season, multitudes of water fowls are seen, pattering their bills among these leaves. We have seen this plant designated by the name, *pistia stratiotes*.

Among the flowering aquatic plants, there is one, that for magnificence and beauty stands unrivalled and alone. We have seen it on the middle and southern waters; but of the greatest size and splendour on the bayous and lakes of the Arkansas. It has different popular names. The upper Indians call it *panocco*. It is designated by botanists by the name *nymphia nclumbo*. It rises from a root, resembling the large stump of a cabbage, and from depths in the water, from two or three to ten feet. It has an elliptical, smooth and verdant leaf, some of the largest being of the size of a parasol. These muddy bayous and stagnant waters are often so covered with leaves, that the sandpiper walks abroad on the surface of them without dipping her feet in the water.—The flowers are enlarged copies of the *nymphia odorata*, or New England pond lily. They have a cup of the same elegant conformation, and all the brilliant white and yellow of that flower. They want the ambrosial fragrance of the pond lily; and resemble in this respect, as they do in their size, the flowers of the laurel magnolia. On the whole, they are the largest and most beautiful flowers, that we have seen. They have their home in dead lakes, in the centre of cypress swamps. Mosquitoes swarm above. Obscene fowls and carrion vultures wheel their flight over them. Alligators swim among their roots; and moccasin snakes bask on their leaves. In such lonely and repulsive situations, under such circumstances, and for such spectators, is arrayed the most gaudy and brilliant display of flowers in the creation. In the capsule are embedded from four to six acorn shaped seeds, which the Indians roast, and eat when green; or they are dried, and eaten, as nuts, or are pulverized into meal, and form a kind of bread.

We have seen a large yellow flower on the arid bluffs of that high limestone wall, that runs, like a huge parapet, between St. Genevieve and Herculaneum, on the west bank of the Mississippi. The summit of this parapet has not more than two or three inches of soil, and is bare of all vegetation, but a sparse, scared grass. It was under the burning sun of July, when every thing, but these flowers, was scorched. The cup of the flower was nearly half the size of the common sunflower. It rose only four or five inches from the soil, and covered it, as with gilding.

We have seen no description of this striking flower, nor have we seen it existing elsewhere.

Mistletoe, viscus alba. This is a parasitic plant, which attaches itself to the body and larger limbs of trees,—most frequently the sycamore and the elm. It is common on the trees along the banks of the Ohio, from Cincinnati to New Orleans. The bright green masses of this plant, with copious clusters of transparent, white berries, make a very singular appearance in winter, when seen clinging to the naked branches. This is the plant, to which the Druids were said to pay divine honors. The agglutinated slime of its berries is used for bird lime.

Long moss, tillandsia usneoides. This parasitic and singular vegetation is first seen in company with the palmetto, about latitude 33°. It hangs down in festoons, like the twiny stems of weeping willow. It attaches itself of choice to the cypress, and, after that, to the acacia. These pendent wreaths often conceal the body of the tree, when bare of foliage, to such a degree; that little is seen, but a mass of moss. Waving in the wind, they attach themselves to the branches of other trees, and thus sometimes form curtains of moss, that darken the leafless forest of winter. They are in color of a darkish gray, and many yards in length. The moss bears a small, trumpet-shaped flower, of peach blow color, and seeds still finer, than those of tobacco.—Associated, as it naturally is, with marshy and low alluvions, where it grows in the greatest profusion, and with the idea of sickness, this dark drapery of the forest has an aspect of inexpressible gloom. It is, when fresh, a tolerable fodder for horses and cattle, and the deer feed upon it in winter. It soon dies on dead trees. Prepared, something after the manner of water rotted hemp, the bark is decomposed, and the fibre remains, fine, black, strong, elastic, and apparently incorruptible. In this state, in appearance and elasticity it resembles horse hair, and, like that, is used for mattresses. Most of the people in the lower country sleep on them, and they are becoming an article of commerce in the upper country. The creoles make various articles of harnessing, as horse collars, and saddle stuffing, of this article. For these purposes, considerable quantities are exported to the upholsterers and carriage makers in the Atlantic country.

To the eye of a naturalist, no doubt, the infinite varieties of plants and flowers in the forests and on the prairies, that distract the gaze of a common observer, and confound all his attempts to class them, may all have an easy arrangement, 'a local habitation and a name.' To another, an attempt to class them would at first seem like numbering the drops of dew, that fall from them. The friable soil of the western country does

not naturally cover itself with the fine sward of the northern Atlantic country. It is the region of coarse grass, tall flowering plants, with gaudy flowers; and to an unpractised eye, presents a Flora of great variety. We have not presumed to give the above, as any thing more than the sketch of a catalogue. Many of the barks of the trees of this valley have medicinal qualities. The numbers, forms and gigantic heights of these weeds and plants are not among the least surprising curiosities to an observer of nature.

The following are among the garden flowers, more particularly of the southern regions.

Jessamines, white, cape, Armenian and yellow. Different kinds of sensitive plants, Spanish dagger. Primrose, Jonquils, white and yellow Iris. Blue and yellow touch-me-not. Violets. Lilies. Roses, monthly, perpetual, moss, scarlet, white, Damascus, multiflora; bell. Honeysuckle. Woodbine. Flowering pomegranate. Bamboo. Myrtle. Altheas, white and red. Crape myrtle. Daffodil. These are the common flowers, where they are not curious in choice, or varieties.*

ANIMALS. We deem it useless to go into detail in the account of animals, which this country has in common with those east of the mountains. We believe, that the catamount, a ferocious animal formerly seen in New Hampshire and Maine, has not been seen west of the mountains. There is a much greater abundance, if not variety, of the deer kind here.

The milder winters, the deeper forests, the more luxuriant pastures, the greater abundance and variety of the nut and acorn bearing trees, the more multiplied means of animal subsistence, would give reason to expect a greater profusion of game. Deer, from pairs to twenty together, are so common a sight, even in the settled country, as not to excite much surprise.—Bears, in the middle and settled regions of the valley, are not common; and a bear hunt is there a matter of novelty and excitement. But high on the Mississippi and Missouri, and on the lower courses of the latter river and its tributaries, in the deep cane brakes and swamps, bears still breed, and range in security; and the planters take the frequent amusement of hunting them. We landed at the cabin of a settler, between White River and Arkansas, who showed the skins of twenty bears, which he had killed that season.

In the northern part of Illinois, towards the sources of the Mississippi, and southwest of the Missouri, on the Osage, and other wooded streams in that direction, bears are still hunted for their skins and their oil. Bear's oil, which is very liquid, transparent, and, when not rancid, mild

* For catalogue of plants and flowers, see Appendix, table No. 111.

and agreeable to the taste, is in those regions extensively used, as a substitute for butter. The hunters ascend the streams at the proper season for hunting them, and pursue the bears in the depth of the wilderness. They remain for the summer season in the woods. Late in autumn they return with bear skins, and the flesh cured, as smoked middlings of pork, and not unfrequently as fat. The oil is put into a periogue; and we have seen a hunter paddling one periogue, and having another lashed and balanced alongside full of oil.

Venison is an important article of food, and of sale in most of the newer villages of the western country. The markets in the larger towns are sometimes supplied with it. It furnishes one of the substantial elements in the subsistence of a back settler. Hunting the deer is the standing amusement of the southern planter. A night hunt seldom fails to furnish a number of these animals. In the northern regions, and about the sources of the Mississippi and Missouri, the elk takes the place of the deer. The moose is sometimes seen with the elk.

In the vast prairies on the Upper Mississippi, Missouri, Arkansas and Red River, and in all the space beyond a belt of a hundred leagues from white settlements, where they are not seen, and the Rocky Mountains, the buffalo is the grand object of hunting and subsistence to the savages. The flesh is the chief article of food, not only of the Indians of those regions, but for the white hunters and trappers. The skins furnish their dress, and the couches, the seats, and the ornamental part of the furniture of their cabins. Tanned and stretched on tent poles, and erected in neat, cone shaped tents, they shelter the savages in their distant migrations from their villages. The buffalo robes furnish one of their most important articles of commerce. Hunting the buffalo is a business of great solemnity, and one of the most important functions of savage life. Every person engaged in it, has his proper post of honor, and his point of concert with the rest. The Indians used to hunt with bows and arrows, but are now commonly armed with yagers. The attack is generally on horseback. When the attacking party have approached the drove, the religious rights are renewed, and the cavalcade, in confidence of the aid of the Great Spirit, dashes upon them. To be successful, the horses must be both fleet, and well managed. It often happens, that the older and more daring animals turn, and make battle; in which case, there is danger to the horse of being gored, and of the rider to be slain.—The animal, in its agony and wrath, is terrible. Sometimes, when feathered with many arrows, or pierced with many balls, it becomes a question, who has slain it. But there are so many witnesses, the wound, among many, that was mortal, is so accurately known, and it is so vital to their peace, that all this should be settled by precedent, that in the

division of the spoil, disputes seldom occur. Every part of the animal is prepared in some way for use. A part is preserved fresh, for immediate use. The fat from the intestines is melted, skimmed, and put into bladders for future use, and proves an agreeable substitute for butter. A protuberance on the shoulders, called the 'hump,' is the choice part of the animal. The return of such a party from a successful hunt is a season of the highest savage holiday. The skins, inwrought into all the furniture of their domestic establishment, so vital to their comfort, and the surplus furnishing their principal article of traffic, are entrusted for preparation, as are all their more laborious kinds of drudgery, to the squaws. This is a very material part of Indian labor. The method of preparing them is primitive and simple, but slow and laborious, and consists, principally, in smoking, drying, and rubbing them. When dressed, they are soft, pliant and durable. By the juice of some vegetable, supposed to be *sanguinaria Canadensis*, fixed by a process, known only to themselves, they paint lines, figures and devices on the buffalo skins, of a beautiful red color, that retains a durable brilliance, unchanged by the sun and air. Among these animals, as among domestic ones, there are the differences of size, age, and beauty and deformity, lean and fat. The males are eatable only a part of the year, and the cows are most sought for hunting, as an article of food. No wild animal has a more noble appearance, than a full grown male buffalo. It has been said, that they are of the same species with domestic cattle. From the habits, as well as the appearance of the animal, we should think not. The color is generally of a brownish gray, and much of the wool, or hair, has the fineness of fur, and by the English, is wrought into articles of a beautiful fabric, which is becoming an article of manufacture. They have burly heads, covered with shaggy wool; and the long and erect hair prevails to the termination of the hump beyond the fore shoulders. They have small and short horns, not more than four or five inches in length, and, compared with domestic cattle, small and fierce eyes; and, viewed all together, have rather a savage and outlandish appearance. But, in fact, they are the same mild animal with the domestic cattle; are easily tamed and domesticated; and the animals, that spring from the mixture of the breeds, are said to unite the valuable properties of both. Their beef is generally preferred to that of the domestic ox. The range of this animal used to extend over all the valley. The eyes of the patriarchal 'residents,' who first fixed themselves in the unbroken wilderness, as they relate, how they used to see countless numbers of these animals scouring the thickets, brighten in the relation, and view the present order of things, which have driven these animals far to the west, with the regrets of hunters. The whites, wherever they have fixed themselves, have waged upon them

a gratuitous war of extermination; and these innocent, useful and noble animals instinctively fly their footsteps. They remain in the vicinity of the savages, who kill no more of them, than subsistence or profit requires. The white hunters have destroyed them for their tongues only. They still range from Red River of the north to the populous regions of Mexico;—but let the smallest settlement of whites be fixed in their vicinity and the animals soon interpose a line of an hundred leagues of demarcation between them and their enemies.

On the northern waters of the Mississippi, and between that river and the lakes, the muskrat and otter are taken in great numbers for their furs. The flesh of the muskrat is prized in these regions by the Indians, as a delicacy. We have been present at these highly flavored repasts, when the peculiar smell of the animal perfumed the cabin.

At the sources of the Mississippi, Missouri, Yellowstone, Platte, White Arkansas and Red rivers, and on all their tributaries, that have courses in the Rocky Mountains, the great object of pursuit, both by the hunters and trappers, white and savage, is the beaver. It is the chief source of gain to the savages; their dependence for their supply from the whites of arms, ammunition, blankets, strouding, traps, whiskey, and all objects of necessity and desire. To these lonely and sequestered regions, repair hundreds of white hunters, who hunt for subsistence, and trap for gain. They make their way in companies of armed partnerships, fitted out, as a kind of guerillas. Sometimes a pair of sworn friends hunt together. There are not a few, who repair alone to these solitary streams and mountains. Outlawry, avarice, necessity, and appetite for lawless and unrestrained and unwitnessed roving, constant exposure and danger, the absolute need of relying alone upon their own personal strength and resources, create a very singular compound of astonishing quickness of perception, and a reckless confidence in their own prowess. We have seen more than one hunter of this cast incurably attached to a solitude of labor and danger, compared with which Robinson Crusoe's sojourn on his island was but a mere pastoral experiment. They furnish an impressive proof that there is no mode of life intrinsically so repulsive and painful, but man may become reconciled to it by habit. A lonely hunter, cast upon the elements, with nothing but prairies and mountains in view, without bread or salt, and every hour in jeopardy from beasts and savages, amidst scenery and dangers, that would naturally tend to raise the heart to God, trusting to no divinity, but his knife and his gun, building all his plans for the future on his traps, regarding the footstep of man imprinted in the sand an object of calculating apprehension, and almost equally dreading the face of the white man and the savage, in situations thus lonely and exposed, braves the heat of summer and the ices of

winter, the grizzly bear, and robbers of his own race, and the savages, for years. When he has collected a sufficient number of packs of beaver, he falls a hollow tree, slides it into some full mountain stream, and paddles down the thousand leagues of the Missouri, and is seen bustling about the streets of St. Louis, to make bargains for his furs. There are very simple and obvious marks, by which to class these packs, according to their quality and value. The more northern the range of the animal, the more valuable is the fur; and in the same parallel, those that live in mountain streams are more valuable, than those that live on plains. The habits of this valuable and social animal are well known, and are the same in this region, as elsewhere. The packs are rated by the pound, and pass in many places, as a substitute for money. They are, in fact, the circulating medium of Canadian and Missouri hunters, *courreurs du bois*, and many tribes of savages. St. Louis is the centre of the fur trade in this valley.

Gray, grizzly, or white bear, *ursus arcticus*. His range is on the upper courses of the Missouri, and its tributaries, and along the bases of the Rocky Mountains. The brown bear, except under particular circumstances, does not face man. But this terrible animal, so far from fearing or flying, pursues him, having less fear of him, than any other beast of prey. Indian warriors, in their vaunting war songs, when they perform what is called 'striking the post,' or rating the bravery of their exploits, recount having slain one of these animals, as no mean exploit, and, in fact, as not inferior to having slain a human enemy. It is one of the largest and strongest animals of prey, being out of comparison larger, than the brown bear. Lewis and Clark give the dimensions of one, slain by their party towards the sources of the Missouri. It measured round the head three feet five inches; round the neck three feet eleven inches; length eight feet seven inches and a half; round the fore leg one foot eleven inches; length of talons four inches and a half! The weight is sometimes nearly thirteen hundred pounds. Like the lion and the tiger on the African deserts, he reigns, the ferocious tyrant of these solitudes. The Crow Indians and the *Gros ventres*, who live in the range of this animal, have lost many of their bravest warriors by him. The white hunters are shy of attacking him, except in companies; and many have been destroyed in the attempt. The skin of those in the more northern regions is very valuable. It is rated in value from thirty to fifty dollars. Fortunately he is not very swift; and as he usually ranges in the timbered regions, and, unlike the brown bear, does not climb, hunters fly him by mounting a tree.

Panther, by the French called *tigre*, is a ferocious animal of the cat family. They range the forests, over all this valley. They are of the

size of the largest dogs, of a darkish gray color, marked with black spots. They are in shape much like the domestic cat, with short legs, large paws, and long talons. Their head, too, resembles that of a cat, with whiskers not quite so long in proportion. They purr in the same way, when they are in good humor, and seem to have all the habits of the cat. We have often heard their wild, nocturnal cry at the commencement of twilight in the forests. They are dangerous when wounded, and under particular circumstances have been known to attack a man. They conceal themselves among the branches of trees, and thence dart upon their prey. They seldom fail to attack a child, should they meet him alone. In the country west of the Lower Mississippi, there is sometimes seen an animal of this kind, but much larger, than the panther. We saw a skin of this animal, killed, we believe, not far from Natchez, and it was the size of a leopard's skin, and of a color, intermediate between the spots of the leopard and the stripes of the African tiger.—There has, probably, been exaggeration, as to the size and numbers of these animals, in the accounts that have been published of them. But there can be no doubt, that an animal of the panther species, of great size and fierceness, ranges these forests, probably an occasional visitor from the Mexican regions.

Wolf. There are two species that are common—the gray, large, forest wolf, and the prairie wolf. We should judge the former to be larger than the Atlantic wolf. We encountered an uncommonly large one, in the forests between Natchitoches and the Sabine. A very large dog could not be brought to advance towards him, and he sat and eyed us, at a few rods distance.

The prairie wolf is of a lighter gray, and not more than half the size of the former. They have sharper noses, and a form more resembling that of a fox. They are bold, fierce, cunning and mischievous animals, and, in their bark and howl, not easily distinguished from the domestic dog. They sometimes travel in packs on the prairies. We have often heard their shrill and sharp bark by night, from a cabin on the prairies. It was evidently a note of defiance to the dogs of the house. The latter retreat towards the cabin, evidencing fear, and diminishing their bark to a whine, and finally pawing at the door for admission within. They are a most annoying scourge to the farmer, and, in fact, the greatest impediment to the raising of sheep on the prairies.

All the American varieties of foxes, porcupines and rabbits are common; the latter so much so, as to be exceedingly annoying to gardens and young nurseries. They breed in vast numbers in the patches of hazles and vines, and skirt the prairies and barrens. Raccoons are very troublesome to corn fields, and it is a sport, preparatory to more serious hunting, for boys to sally out, and take them by night.

Woodchucks and opossums abound, and are generally so fat, as not to be able to reach their burrows, if overtaken at a little distance from them. These animals are called by the French, *'cochons du bois.'* They scald off the hair, and dress them; as roasting pigs, and consider them a great delicacy. The singular formation of the opossum is too well known, to need description; but they have one habit, that we have not seen described. They seem to be lazy, reckless and stupid animals; and prove, that the profoundest dissimulation may consist with the greatest apparent stupidity. It is familiar to every one, who has often seen this animal, that when you come upon it, at any distance from its shelter, which is a hollow tree or log, instead of retreating for that shelter, it turns on its side, throws out its legs and settles its body, its eyes, and its features into the supineness of death. Observers have remarked, that the imitation is perfect in every part of the body, but the tail, and that this retains a living and elastic coil, that only appertains to life. Even the instinctive shrewdness of the dog is at fault: for he applies his nose to the animal, and turns it over, and passes it by as dead. This astonishing trait of the instinct, or reasoning of this sluggish animal, is transferred by a figure to men. In the common parlance of the country, any one, who counterfeits sickness, or dissembles strongly for a particular purpose, is said to be 'possuming.'

Squirrels. Gray, black, chesnut, and all the smaller varieties of this animal abound. There is no part of the valley, where they do not prey upon corn fields, adjacent to woods, in such a manner, as that in autumn, farmers will not consider it an object to furnish a boy with gun, powder and lead, on condition, that he will shoot only about their corn fields. It is a cheering spectacle in autumn, to walk in the beech and hickory bottoms, where you may often see, at one view, half a dozen of these active and proud little animals, flourishing their erect and spread tails, barking defiance at you, or each other, and skipping, as if by the aid of wings, from branch to branch. It is a fact, to which we can bear ocular testimony, that they cross rivers; at some times swimming; at other times on a chip, or piece of bark, raising and spreading their tails; by way of sail. It often happens to these, as to other inexperienced navigators, that they spread too much canvass, and are overset, and drowned. It is related, as having happened in the year 1811, that they emigrated from the north towards the south by thousands, and with a front of some regularity, along the lower part of the state of Ohio, and the whole front of Indiana. Thousands were drowned, in attempting to cross the Ohio.

The skunk is common, and is oftener met, than east of the mountains; but in other respects is the same bold animal, and possessing the same reliance upon his peculiar kind of defence.

Gopher, a species of mole, more than twice the size of the common field mole. It burrows in the prairies; and there are immense tracts covered with the little hillocks made by the earth which they have dug from their burrows. They have an exquisitely soft, fine fur, of cerulean color; and they have on each side of their jaws a pouch, or skinny bag, of considerable size, which is usually seen distended with the dirt which they are transporting from their holes. They prey on the bulbous roots of flowers, on potatoes, and other vegetables, and are particularly destructive to young orchards, killing the trees by gnawing off a complete circle of bark round the body, near the roots. The mounds which they raise, are serious impediments in the way of driving carts and carriages over the theatre of their operations.

An animal confounded with this, but not the same, inhabits the shores along the Gulf of Mexico, and is called the salamander. It is of the size, and in some respects, the appearance of a common rat. It is never seen abroad by day. It is a fierce and fighting little animal, when overtaken in its burrows, and the wounds inflicted with its teeth severe.

Elk. Large flocks of these animals are found in the northern limits of the range of the buffalo. To our view, an elk is no more than a very large deer, something exceeding the height of a common horse. Their flesh has the same flavor as common venison. Their habits are similar to those of the deer. In the country where they range, hunting them is an object with the Indians, only secondary to that of hunting the buffalo. We have never seen the moose in this country; but it is found in the northern and northwestern regions.

Antelope, a kind of mountain deer, seen bounding on the summits of the highest and most precipitous bills at the sources of the Missouri.—They are described as being very fleet and beautiful animals, and their flesh is preferred to that of the common deer. Timid as they are, their excessive curiosity lures them to their destruction. They gaze upon man, until, as if charmed, they seem arrested to the spot, and in this way are sometimes killed.

Mountain sheep, an animal, that, like the former, inhabits mountains, choosing for its range the most remote and inaccessible at the sources of the Missouri. They have horns of prodigious size; and are rather larger than the deer. They are covered with a wool, like fur, in some parts white, and in others brownish. Their range is so solitary, and difficult of access, that they are not often killed.

Prairie dog, *arctomys ludoviciana*. This animal has received its absurd name from the supposed similarity of its peculiar cry, or note, to the barking of a dog. In other respects there is little resemblance to that animal. It is of reddish brown color, interspersed with some gray and

black. The color of the underside of the body is not unlike that of the skunk. It has rather a wide and large head, short ears, black whiskers, and a sharp and compressed nose. It something exceeds twice the size of a common gray squirrel. One of them measured from the tip of the nose to the extremity of the tail nineteen inches. Like the beaver they are social and gregarious, living on the dry prairies in large communities, some of which occupy a circuit of miles. They live in burrows; and at the entrance there is a mound, formed by the earth which they bring up in the excavation. In whatever direction they move, they have well beaten highways, from which every impediment is carefully removed. There are several occupants, probably all of the same family, of one burrow. In mild weather they are seen sporting about the mouths of their habitations, and seem to have much of the sprightliness, activity, and spirit of defiance of the squirrel. At the apprehended approach of danger they raise that peculiar bark, from which they have derived their name. On the nearer approach of danger they relinquish their vamping, and retreat to their dens. They are said seldom to require drink, and to remain torpid in their burrows through the winter. When overtaken away from its home, this little animal shows all the impotent fierceness of a small cur. But when taken, it easily domesticates and becomes gentle and affectionate.*

BIRDS. This valley, embracing all the varieties of the climate of the country east of the mountains, might be supposed to have the same birds, and those birds the same habits. The former is true, and the latter is not. We have noted no birds in the Atlantic country that we have not seen here. We have many that are not seen there; and those that are common to both regions have not the same habits here as there. We have no doubt, that cultivation and the habitation of civilized men affect the habits, and even the residence of birds. There are many in the more populous and cultivated regions beyond the mountains, that seem to belong to orchards and gardens, and that appear to exult and be at home only in the midst of fruit arbors, and groves reared by art and luxury. It is remarked in the more populous and cultivated districts of the West that in proportion as the wilderness disappears, and is replaced by apple, pear, peach, and plum trees, and fruit gardens, the birds, which cheered the infancy of the immigrants, and whose notes are associated in recollection with the charms of youthful existence, and the tender remembrances of the natal spot, and a distant and forsaken country, are found among the recent orchards. Every immigrant, especially who was reared in New England, remembers the magpie, or boblink, the bird of half-

*For catalogue of beasts, see Appendix, table No. IV.

formed leaves, of planting, and the freshness of spring. He remembers to have heard them chattering in the woods, almost to tiresomeness.— They are occasionally seen in the middle and northern regions of this valley. They are seldom heard to sing, and are only known by the lover of nature, who hears in the air, as they pass over his head, the single note which they utter at the East, when they are leaving that country. Some years since, in Missouri, we saw a number of the males gathered on a spray, in the midst of a low prairie, of a sunny morning, after a white frost. They were chattering away in their accustomed style.— But they did but half carry out the song that we used to hear in the meadows of New England, leaving a painful break in the middle, and reminding us of the beautiful passage in the Psalms, touching the exiles on the streams of Babylon.

Robin, *turdus migratorius*. The robin red-breast, in the northern Atlantic country, is, more than any other, the bird of orchards and gardens, and is there almost identified with the domestic affections of man. This delightful bird, in many places protected from the gun by public feeling, sings there such an unpretending and yet sweet song, that the inhabitants need not regret wanting the nightingale. In the West this bird makes annual visits; and is seen in the autumn, the winter and spring, but never, at least in the southern parts of the valley, in the summer. Thousands winter in Louisiana, and perch by night in the thick cane brakes, and are killed with a stick. In the middle regions, they visit the country in the autumn, to feed on the berries of the spice wood, *laurus bengoin*. They are recently heard beginning to sing in the orchards.

The thrasher, *turdus rufus*; the perwink, *turdus fuscus*; and the blue bird, are, in numbers, habits, and song, as at the North, except that the blue bird is heard every pleasant day through the winter. The splendid plumage, the bold habits, and the shrill scream of the blue jay, are alike familiar to the woods of Canada and the Sabine.

Mocking bird, *turdus orpheus*, vel *polyglottus*, is seen in the middle and southern Atlantic States; but is far more frequent in this valley.— Its gay, voluble, and jerky note, imitating that of all other birds, and heard at all seasons of the year, renders it a delightful tenant of the southern woods. It breeds in thorn bushes, and among the arbors of the briar vines; and delights to sit on the tops of chimnies, darting perpendicularly, as if in a frolic, high into the air above, and descending by the same movement, singing its gayest strain all the while. It is a bird of sober plumage, and from its delicate structure, rather difficult to rear in a cage.

Redbird, *cardinalis Virginiana*. The range, frequency, and habits of this most beautiful bird are the same with the former. Its note has but little range. We have not heard it sing more than five notes; but

as they journey through the air in the spring, to the sources of the great rivers and lakes, and in autumn, to the Gulf of Mexico, is one of the most familiar sounds to the ear of an inhabitant of the West, and is one of his strongest and pleasantest associations with spring and autumn. The noise of migrating geese and ducks, at those periods, is also familiar to the ear of an Atlantic inhabitant. That of the swans, pelicans and cranes is peculiar to this valley. The swan is well known for its stateliness and brilliant white. Its migrating phalanxes are in perfectly regular forms, as are those of the geese. They sometimes join forces, and fly intermixed with each other. Their noise, on the wing, is like the distant sound of a trumpet. They are killed on the rice lakes at the north, in the summer, and in the Gulf and its neighboring waters in the winter. The younger ones are as fine for the table, as geese. The older ones are coarse and tough. They are of use for their fine quills, feathers and down.

Sand-hill crane, *grus Canadensis*, is a fine, stately bird, as majestic in the water, as a swan, and considerably taller; of a perfectly sleek, compact and oily plumage, of a fine grayish white color. They are seen in countless numbers, and not being of sufficient use to be the pursuit of the gunner, they probably increase. We have seen in the prairie between the Missouri and Mississippi, at the point of junction, acres covered with them, in the spring and autumn. They seem, at a distance like immense droves of sheep. They migrate in company with the pelicans; and it is an interesting spectacle, that during their migrations they are seen for days together, sailing back and forward in the upper regions of the air, apparently taking the amusement of flying evolutions, and uttering at the same time a deep cry, which is heard distinctly, when the flocks are so high in the air, as not to be seen, or only seen when their white wings are discerned, as specks of snow, from their being in a particular position to the rays of the sun.

The pelican is a singular water fowl, with an ivory bill, extremely white plumage, larger in appearance, but not so heavy, as a full grown Canadian goose. They frequent the lakes and sand bars of the rivers, during their migrations, in inconceivable numbers. Flocks of them, reaching a mile in length, passing over the villages, are no unusual spectacle. Below their beak, or bill, they have a pouch, or bag, which will contain, it is said, two quarts. In the autumn, when associated with the swans, geese, brants, ducks, cranes and loons, on the sand bars of the rivers, from their incessant vociferousness, they are very annoying companions to the inmates of boats, who lie to, and wish to find sleep.

This being a country of long rivers, of frequent lakes and bayous, and sluggish waters, and marshy inlets of the sea, on the Gulf of Mexico, it would be expected, as is the fact, that it would be the home of vast num-

bers and varieties of water fowls. No waters on the globe show greater numbers and varieties, than the Gulf of Mexico. In the winter, when these fowls take shelter in the bayous, swamps and prairies of Louisiana, they are killed in great numbers by the French and Indians. Water fowls are abundant and cheap in all the markets. Their feathers and quills are an object of some importance in commerce. From the double annual migrations of the water fowls, the inhabitants of the middle regions of the valley have biennial harvests of them.

Pigeons sometimes are seen in great flocks. Their social and gregarious habits incline them to roost together, and their places of resort are called 'pigeon roosts.' In these places they settle on all the trees for a considerable distance round, in such numbers, as to break off the branches.

Turkey, *mëlcagris gallipato*. The wild turkey is a fine, large bird, of brilliant, blackish plumage. It breeds with the domestic one; and when the latter is reared near the range of the former, it is sure to be enticed into the woods by it. In some places they are so numerous, as to be easily killed, beyond the wants of the people. We have seen more than an hundred driven from one corn field. The Indians, and the western sportsmen, learn a way to hunt them, by imitating the cry of their young.

Partridge, *tetrao perdix*, the same bird, which is called quail in New England. They breed in great numbers in the settled regions, and, much as they are hunted, increase with the population. They are brought in great numbers to the markets; and are not unfrequently taken, as they are crossing the rivers, on the steam boats. One of the standing amusements of the country is to take them, by driving them into a net.

Pheasant is the same bird, which is called partridge in New England. It is not so common in this country, as in that. It is something more brilliant in its plumage.—Though not often seen, it is frequently heard drumming on the logs in the deep forests.

Prairie hen, *tetrao pratensis*, is seen in great flocks in the prairies of Missouri and Illinois, in the autumn. It is rather larger than the domestic hen. In flight, it appears like the pheasant and partridge, and is a beautiful bird. It lights on barns, and hovers about corn fields. When the corn is not gathered, until in the winter, as often happens in the West, flocks of these birds are apt to prey upon it. It is easily tamed and domesticated. The flesh has the flavor and color of the wild pigeon.

Hunters assert, that there is another bird of the pheasant class, at the sources of the Missouri, of the size of a turkey.

Humming-bird, *trochilus*. They are of two colors—olive and green.

REPTILES. Animals of the serpent, turtle and frog class do not materially differ from those, of the same parallels in the Atlantic country.

All the varieties of the rattle snake, *crotalus horridus*, are seen, in some places in pernicious abundance. The yellow rattle snake is the largest of the species. It is sometimes seen, as large as a man's leg, and from six to nine feet in length. A species of small rattle snake, is sometimes seen in great numbers on the prairies. It is said, in the regions far to the west, to consort with prairie dogs, and to inhabit the same burrows. There is a very troublesome species, called snappers, or ground rattle snakes. They travel in the night, and frequent roads and house paths.

The copper head is a terrible serpent, deemed to inflict a more dangerous bite, than the rattle snake; it inhabits the same region, but is not so common as the former. It has a dirty brown color; and when it has recently shed its skin, some parts of its body resemble burnished copper, whence it derives its name. It is of a smaller size than the rattle snake.

Moccasin snake. There are three or four varieties of this serpent, inhabiting the southern country. The upland moccasin has many aspects in common with the rattle snake, but is a serpent still more repulsive in appearance. They are sometimes of great size; and their fang teeth are the largest and longest that we have seen. They are most often seen basking among the bastard cane. The water moccasins, as their name imports, are water snakes. The largest variety resembles the water snake of the Atlantic country. It has a very large flat head, and is thence called by the French, '*tete plat*.' It opens its upper jaw at right angles to the under one. It has a ground colored, scaly back; and in point of venom, it is classed with the rattle snake. There is another species of the moccasin, rarely seen out of the water, of a brilliant copper color, with annular, gray stripes, marking off compartments at equal distances.

Brown viper, or hissing snake. It is of a dirty brown color, from six to eight inches long; with a body large in proportion, and terminating abruptly in a sharp tail. When angry, their backs change color, and their heads flatten, and dilate to twice the common extent, and their hiss is like that of a goose. They are extremely ugly animals; and though very diminutive, are supposed to be of the most venomous class. We confined one by a stick across its back, and it instantly bit itself in two or three places. We gave it liberty, and observed its movements. It soon became very much swollen, and died.

Horn snake. Judge Bullit, of Arkansas, informed us that he killed one of these serpents in his smoke house. He described the serpent as of a moderate size, blackish color, and with a thorn in the tail, resembling that of a dunghill cock. From its movements, he judged it to be its weapon of defence. We have heard others, who have killed or seen this serpent, describe it. We have heard many of the common reports of

its deadly venom, but never have known a single attested proof; and we consider them all entirely fabulous.

We have neither the information, nor space, to enable us to be minute in our catalogue and description of these loathsome and dreaded reptiles. We have seen six or eight species, that we never saw in the Atlantic country; and we consider the southern parts of this region more infested with serpents than that. Perhaps we might except from this remark the southern Atlantic country. Wherever the population becomes dense, the swine prey upon them and they quickly disappear. The most permanent and dangerous resorts of these reptiles are near the basis of rocky and percipitous hills, about ledges and flint knobs, and, in the lower and southern country, along the bayous, and near those vast swamps, that cannot be inhabited for ages. People are often bitten by these terrible animals. The pain is excruciating; and the person that is badly bitten, swells, and soon becomes blind. The more venomous of the serpents themselves become blind, during the latter part of summer. They are then, of course, less apt to strike their aim; but their bite, at this period, is more dangerous. The people suppose this blindness occasioned by the absorption of their own poison into their system.

Whether it be, that the numerous remedies, that are prescribed here, are really efficacious, or whether, as to us appears more probable, the bite of these venomous reptiles is not fatal, unless the poison is conveyed into some leading vein, from whatever cause it be, it so happen, that few fatalities occur from this cause. We have seen great numbers, that have been bitten by rattle snakes, or copper heads, or moccasins; and we have never seen a fatal case. We read, indeed, of a most tragical occurrence, more horrible in the relation, than the ancient fiction of Laocoon. An immigrant family inadvertently fixed their cabin on the shelving declivity of a ledge, that proved a den of rattlé snakes. Warmed by the first fire on the hearth of the cabin, the terrible reptiles issued in numbers, and of course in rage, by night into the room, where the whole family slept. As happens in those cases, some slept on the floor, and some in beds. The reptiles spread in every part of the room, and mounted on every bed. Children were stung in the arms of their parents, and in each other's arms. Imagination dares not dwell on the horrors of such a scene. Most of the family were bitten to death; and those, who escaped, finding the whole cabin occupied by those horrid tenants, bissing, and shaking their rattles, fled from the house by beating off the covering of the roof, and escaping in that direction.

It would be impossible to enumerate all the remedies that are prescribed here, for the bite of these reptiles. It is a received maxim, that the

application of volatile alkali, internally, and to the wound, neutralizes the poison, and is a certain cure.

Of harmless serpents, this country has the usual varieties,—as the green, garter, chicken, and coach-whip snakes.

We have often seen the glass snake, with a body of the most lustrous brilliance. A stroke across the back separates the body into a number of pieces. Each of these pieces preserves for some time the power of locomotion, and continues to move. The people believe, that these pieces soon meet, and unite, and become as before the separation.

Bull, or prairie snake, is one of great size, and horrid appearance. It is common on the prairies, lives in holes in the ground, and runs at the passing traveller with a loud hiss; but if he stands, it instantly retreats to its hole. It is perfectly harmless; though such is its size, boldness and formidable appearance, that it is long, before the resident in these regions gets over his horror of it.

Lizards, *laecerta*. Ugly animals of this kind are seen, in greater or less numbers, in all the climates. They are found under cotton logs, and are dug from the rich and muddy alluvions. These last are lazy and loathsome animals, and are called 'ground puppies'. We never saw any disposition in them to bite. Common small lizards are frequent in the southern districts, running along the logs and making just such a sound as the rattle snake, when he gives his warning.

There are varieties of small chameleons. They are apparently harmless animals; though when we have caught them, they showed every disposition to bite. They will change in half an hour to all the colors of the prism. Green seems to be their favorite color, and when on a green tree, that is their general hue. While in this color, the under part of their neck becomes a beautiful scarlet. Their throat swells, and they emit a sharp note, like that of one of the larger kinds of grasshoppers, when singing. We have placed them on a handkerchief, and they have gradually assumed all its colors. Placed on a black surface, they become brown; and they evidently suffer while under this color, as is manifested by uneasy movements, and by strong and quick palpitations, visible to the eye. They are very active and nimble animals, three or four inches in length.

Scorpions are lizards of a larger-class, and flatter heads. They are animals of an ugly appearance, and are deemed very poisonous. We could not learn, however, that any person had been known to be bitten by them. When attacked, they show, indeed, the anger and the habits of serpents, vibrating a fiery and forked tongue, and biting with great fury at the stick, which arrests them.

What is here called tarantals, is a huge kind of spider, estimated to inflict a dangerous bite.

The copper colored centipede is of cylindrical form, and oftentimes of the size and length of a man's finger. A family is said to have been poisoned, by taking tea, in which one of them had been inadvertently boiled.

Alligator is the most terrible animal of this class. This large and powerful lizard is first seen in numbers, in passing to the south, on the Arkansas,—that is to say, a little north of 33°; and this is its general northern limit across the valley. Vast numbers are seen in the slow streams and shallow lakes of Florida and Alabama; but they abound most on Red River, the Mississippi lakes, and the bayous-west of that river. Forty have been seen at one time on a muddy bar of Red River. On these sleeping waters, the cry of a sucking pig on the banks will draw a shoal of them from their muddy retreats at the bottom. The largest measures something more than sixteen feet from the snout to the extremity of the tail. They have at times, especially before stormy weather, a singular roar, or bellow, not exactly, as Bartram has described it, like distant thunder,—but more like the half suppressed roarings of a bull. When moving about on their customary vocations in the water, they seem like old logs in motion. In fine weather they doze in listlessness on the sandbars. Such is their recklessness, that they allow the people on the passing steam boats to come within a few paces of them. The ascent of a steam boat on an alligator stream, at the proper season, is a continual discharge of rifles at them. A rifle ball will glance from their bodies, unless they are hit in a particular direction and place. We witnessed the shots of a man, who killed them nine times in ten. They are not, like tortoises, and other amphibious animals, tenacious of life, but bleed profusely, and immediately expire, when mortally wounded. They strike with their tails, coiled into the section of a circle; and this blow has great power. The animal stricken, is by the same blow propelled towards their mouth, to be devoured. Their strength of jaws is prodigious, and they are exceedingly voracious. They have large, ivory teeth, which contain a cavity, sufficiently large to hold a musket charge of powder, for which purpose they are commonly used by sportsmen. The animal, when slain, emits an intolerable smell of musk; and it is asserted, that its head contains a quantity of that drug. They will sometimes chase children, and would overtake them, were it not for their inability to make lateral movements. Having few joints in their body, and very short legs, they cannot readily turn from a straight forward direction. Consequently, they who understand their movements, avoid them without difficulty, by turning off at right angles, and leaving the

animal to move forward, under its impulse in that direction. Indeed, they are by no means so dangerous, as they are commonly reputed to be. It is said, they will attack a negro in the water, in preference to a white. But they are chiefly formidable to pigs, calves and domestic animals of that size. They are rather objects of terror from their size, strength, and ugly appearance, and from their large teeth and strong jaws, than from the actual injuries, which they have been known to inflict. The female deposits a great number of eggs, like a tortoise, in a hole on the sandbars, and leaves them to be hatched by the ardors of the sun upon the sand. When they are hatched, the turkey buzzards and the parents are said alike to prey upon them. Instinct prompts them for self preservation to plunge into the water. The skin of the alligator is valuable for the tanner.

Tortoises. There are the usual varieties of the Atlantic country. The soft shelled mud-tortoise of the lakes about New Orleans, and west of the Mississippi is said to be not much inferior to the West India sea turtle for the table. Epicures, who are dainty in their food, consider the flesh a great delicacy.

The lower part of this valley is a land of lakes, marshes and swamps; and is of course, prolific in toads, frogs, and animals of that class.

The bull frog, *rana boans vel pipens*. The deep notes of this animal are heard in great perfection in the swamps back of New Orleans.

Murena siren is a very singular animal, as far as we know, undescribed by naturalists. It somewhat resembles the lamprey, and is nearly two feet in length. It seems intermediate between the fish and the lizard class. It has two short legs, placed near the head. It is amphibious, and penetrates the mud with the facility of crawfish.

Crawfish. There are vast numbers of these small, fresh water lobsters, every where in the shallow waters and low grounds of this country. By penetrating the leveè of the Mississippi, they have more than once made those little perforations that have imperceptibly enlarged to crevasses, by which the inundation of the river has been let in upon the country.

In the pine barrens of Florida, Alabama and Mississippi, is found an animal, apparently of the tortoise class, commonly called a *gouffre*. It has a large and thick shell, and burrows to a great depth in the ground. It is of prodigious power and strength, and resembles in many respects the loggerhead turtle.

The ichthyology of the Gulf of Mexico and its waters, of the Mississippi, and the waters west of it, and of the northern lakes and their waters, has not been scientifically explored. We are able only to give that of the Ohio and its waters, as explored and described by Mr. Rafi-

esque. We remark, however, that the fishes of all the western waters are very similar, and that the classes of this table include most of the fishes that are found in the waters of the Mississippi valley.

THORACIC FISHES. Salmon perch, *perca salmonea*. A fine, spotted fish, from one to three feet long; flesh white, tender and well flavored. Vulgar name, Ohio Salmon.

Golden eyed perch, *perca chrysops*. Rock bass. An excellent table fish not often taken.

Black dotted perch, *perca nigro punctata*. Black bass. Found on the lower waters of the Ohio.

Bubbler, *ambloston*. Buffalo perch. Found in all the waters of the Ohio. Its name is derived from the singular grunting noise which it makes, a noise, which is familiar to every one, who has been much on the Ohio. It is a fine fish for the table, weighing from ten to thirty pounds.

Dotted painted tail, *calliurus punctatus*. Bride perch, or painted tail. A small fish, from four to twelve inches long; not very common in the Ohio. More common in the small tributaries.

Gilded sun fish, *ichthelis macrochira*. A beautiful fish, three or four inches long, common in the Ohio and its waters.

Blue sun fish, *ichthelis cyanella*. Hardly so large, as the former.

Red eye sun fish, *ichthelis erythroptis*. Red eyes.—Length three to eight inches.

Eared sun fish, *ichthelis aurita*. Sun fish. Length from three to twelve inches.

Big eared sun fish, *ichthelis megalotis*. A fine small fish. Length from three to eight inches. Common in the waters of Kentucky. Vulgar name, red belly.

River bass, *lepomis*. Common in the Ohio and its waters, and easily taken with the hook.

Pale bass, *lepomis pallida*. Yellow bass. From four to ten inches.

Streaked cheeks, *lepomis trifasciata*. Yellow perch; one of the best kinds of table fish. Length from one to two feet. Common in the Ohio and its waters.

Brown bass, *lepomis flexuolaris*. Black perch. Length from one to two feet. Like the former, a fine fish.

Trout bass, *lepomis salmonea*. Brown trout. Length from six to twenty-four inches. Delicate and white flesh.

Spotted river bass, *lepomis notata*. Same vulgar name with the former, and commonly considered the same fish. Differs from it in many respects.

Sun fish river bass, *lepomis ichtheloides*. White bass. Length from four to eight inches.

Gold ring promoxis, *promoxis annularis*. Silver perch. Length from three to six inches.

Red eye, *agloccntrus*. Green bass. A very beautiful fish, from three to twelve inches long.

White eyed barbot, *pogostoma leucops*. Bearded sun fish. A very beautiful fish, twelve inches long, and sometimes weighs a pound.

Hog fish, *etheostoma*. Hog bass. Length from three to nine inches.

Bass hog fish, *etheostoma calliura*. Minny bass.

Fox tail hog fish, *etheostoma flabellata*. Fox tail.

Black hog fish, *etheostoma nigra*. Black minny. A very small fish.

Blunt nose hog fish, *etheostoma blennoides*. A very singular looking, small fish.

Common hog fish, *etheostoma caprodes*. Length from two to six inches.

ABDOMINAL FISHES. Ohio gold fish, *dromolotus chrysocolor*. Ohio shad. Length from twelve to eighteen inches. Is seen in the spring from Cincinnati to the falls of the Ohio.

Spotted gizzard, *dorostoma rotata*. Hickory shad. Length nine to ten inches.

Ohio gold herring, *notemigonus auratus*. Gold herring. Length from four to eight inches. Flesh tolerably good.

False herring, *hyodon*. Herring. Five species. Not at all like the herring of the Atlantic waters. Tolerable fish for the table.

Salmo, trout. This species is found on the upper waters of the Missouri and the Ohio. The white fish of the lakes has been sometimes classed in this class, and has been said to be found on the head waters of the Wabash and the Miami.

Alleghany trout, *salmo Alleghaniensis*. Found on the mountain brooks of the Alleghany and Monongahela. Length eight inches. Fine for the table. Take the bait like all this species, with a spring.

Black trout, *salmo nigrescens*. Rare species. Found on the waters of Laurel Hill. Length six inches.

Minny, *minnulus*. Bait fish. Of these diminutive fish, there are a vast number in the different waters of the Mississippi. Sixteen species have been noted on the Ohio. The larger kinds of them bear the name of shiner.

Gold head shiner, *luxilus chrysocephalus*. Gold chub. Length six inches.

Kentucky shiner, *luxilus Kentuckiensis*. Red tail. Fine fish bait.

Yellow shiner, *luxilus interruptus*. Yellow chub. Three inches in length.

Big black chub, *semotilus dorsalis*. Big back minny. Length three to six inches.

Big head chub, *scotilus cephalus*. Big mouth. Length from six to eight inches.

Silver side fall fish, *rutilus plagyrus*. Silver side. Length from four to six inches.

Baiting fall fish, *rutilus compressus*. Length from two to four inches.

Anomal fall fish, *rutilus anomalus*. Length three inches.

Red minny, *rutilus ruber*. A beautiful, small, red fish, two inches in length.

Black headed flat head. Length three inches.

Ohio carp sucker. Length from one to three feet. Good for the table. Taken with the hook, seine or spear.

Buffalo carp sucker. Found on the lower waters of the Ohio. Vulgar name, buffalo perch. One foot in length. One of the best fish for the table.

Brown buffalo fish, *catostomus babalus*. One of the best fishes in the western waters, and found in all of them. Length from two to three feet, and weighing from ten to thirty pounds.

Black buffalo fish, *catostomus niger*. Found in the lower waters of the Ohio and in the waters of the Mississippi. Sometimes weighs fifty pounds.

Olive carp sucker. A variety of the former. Not so good for the table. Commonly called carp.

Sailing sucker, *catostomus velifer*. Skim back. Length from twelve to fifteen inches.

Mud sucker, *catostomus xanthopus*. Length from six to ten inches. Flesh very soft.

Black faced sucker, *catostomus melanops*. Black sucker. Length from four to six inches.

Black back sucker, *catostomus melanotus*. Blue sucker. Length eight inches.

Red tail sucker, *catostomus erythrus*. Red horse. Length one foot.

Kentucky sucker, *catostomus flexuosus*. Common sucker. Ten to twelve inches long. Bites at the hook, and is fine for the table.

Big mouthed sucker, *megastomus*. Brown sucker. Taken with the seine.

Pittsburgh sucker, *catostomus Duquesni*. White sucker. Length fifteen to twenty inches. Found in the Ohio, near Pittsburgh. Good for the table.

Long sucker, *catostomus elongatus*. Brown sucker. Length fifteen to twenty inches. Of the same quality, and found in the same waters with the former.

Black suckrel, *cykleptus nigrescens*. Rarely seen in the Ohio and Missouri. Fine for the table. Length two feet.

Cat fish, *pimelodus*. This is the most common fish in all the western waters. Twelve species have already been noted in the Ohio. The varieties are very numerous in the waters west of that river.

They are without scales, and of all colors and sizes. Their mouths, when open, are circular. They are easily taken with a hook. They receive their English name from the noise which they make, when at rest, a noise very similar to the purring of a cat, and one of the most familiar to those who are used to the western waters.

Spotted cat fish, *silurus maculosus*. White cat fish. Length from one to three feet. Flesh good.

Blue cat fish, *pimelodus cerulescens*. They have been taken, weighing about one hundred and fifty pounds.

Silver cat fish, *pimelodus argyrus*.

Clammy cat fish, *pimelodus viscosus*.

Clouded cat fish, *pimelodus nectulosus*.

Yellow cat fish, *pimelodus caprius*.

Black cat fish, *pimelodus melas*.

Yellow headed cat fish, *pimelodus xanthocephalus*.

Mud cat fish, *pimelodus limosus*.

Mud cat, *pilodictis*. Mud fish. Buries itself in the mud. Sometimes weighs twenty pounds. Bites at the hook, and is good for the table.

Yellow back, *noturus flava*. Commonly confounded with the yellow cat fish; but is a different fish.

Ohio totor, *hypertelium macropteron*. Length two or three inches. Makes itself a cell by surrounding its place with pebbles; hence, from the Virginia word 'tote,' to carry, called a totor.

Ohio ribband fish, *sarchisus vittatus*. Length from six to twelve inches. Gar fish.

Pike, *esox*. We have noted a great many species of pikes in the Ohio and Mississippi, and their waters. They are called pike, pickerel and jack fish; and perfectly resemble the fish of the same names in the Atlantic waters. The Indians of the Wabash and the Illinois call them *piccannau*. They are of all sizes, from half a pound to twenty pounds.

Esox vittatus, jack fish. White pickerel. Length sometimes five feet.

Gar fish, *lepiosteus*. There are a great many varieties in the western country. The alligator gar is sometimes eight feet in length; and is strong, fierce, voracious, and formidable not only to the fish, which he devours by tribes, but even to men, who go into the water near him. Their scales will give fire with the steel. They are not used for the table;

but whether this be owing to the difficulty of skinning them, or to the badness of the flesh, we know not.

Duck bill gar fish, *lepiosteus platostomus*. Length sometimes four feet. Taken with the hook or the spear; and is good for the table.

White gar fish, *lepiosteus albus*. Length four to six feet. Resembles the pike in shape.

Ohio gar fish, *lepiosteus oxyeus*. Length six feet. Rarely seen; and not good for the table.

Long bill gar fish, *lepiosteus longirostris*. Length forty inches.

Devil-jack-diamond fish, *litholepis adamantinus*. This is the monster of the Ohio. It is rarely seen as high as the falls of the Ohio, and probably lives in the Mississippi. Length from four to ten feet. One was caught, which weighed four hundred pounds. It is extremely voracious; and like the alligator gar fish, or *lepiosteus ferox*, its scales will give fire with the steel.

Apodial Fishes. Broad tail eel, *anguilla laticauda*. Length from two to four feet.

Black eel, *anguilla atterima*. Same length as the former; and fine for the table.

Yellow bellied eel, *anguilla xanthomelas*. Length from two to three feet.

Yellow eel, *anguilla lutia*. Length two feet. This is the best of the species for the table.

ATELOSIAN FISHES. Sturgeon, *accipenser*. There are six species found in the Ohio.

Spotted sturgeon, *accipenser maculosus*. Length two feet.

Shovel fish sturgeon, *accipenser platyrhynchus*. Shovel fish. Length two to three feet. Weight twenty pounds. Tolerable for the table.

Fall sturgeon, *accipenser scrotimus*. Length five to six feet. Indifferent for the table.

Ohio sturgeon, *accipenser Ohioensis*. Length three to four feet.

Big mouth sturgeon, *accipenser macrostoma*. Length four feet. Good for the table. Very large mouth.

Flat nose double fin, *dinectus truncatus*. Length two feet. Skin thick and leathery.

Western spade fish, *polyodon foltum*, is not eaten. Length from one to three feet.

Toothless paddle fish, *platinostra edentula*. Length three to five feet, and sometimes weighs fifty pounds. Indifferent for the table. The spatula is cunei-form, eight to twelve inches long, and used for digging in the mud.

Gourd fish sturgeon, *accipenser laginarius*. Gourd fish. Length two to three feet.

Mississippi saw fish, *pristis Mississippiensis*. Length three to six feet. Twenty-six long sharp teeth on either side, in the form of a saw; and is commonly shown in museums.

Spotted horn-fish, *proceros maculatus*. Length two to three feet. Horn one fourth the length of the body.

The fish of the western rivers are generally decried in comparison with those of the Atlantic waters. The comparison has not been fairly instituted. The former are all, except those hereafter-described—as belonging to the market of New Orleans, fish of fresh waters; the latter chiefly of the sea. Fresh water fish, in general, will not vie with those of the sea. The comparison being between the fresh water fish of the one country and the other, the latter are as good as the former. The shad and salmon of the Atlantic waters, it is true, are nowhere found, though we have fish that bear the same name. Those fine fish have their general habitancy in the sea. The trout of Louisiana and Florida is not the same with the fine fish of that name, that is taken in the cold mountain streams of the northern country of the Atlantic. It is a fish of the perch class, beautifully marked with golden stripes, and taking bait with a spring, like the trout. It weighs from one to four pounds. It is a fine flavored, solid fish for the table. No angling can compare with that of this fish in the clear pine wood streams of the southern divisions of this country. With fish bait a barrel may be taken in a few hours.

Cat fish of the Mississippi, *silurus Mississippiensis*, differs considerably from that of the Ohio. It is often taken, weighing over an hundred pounds.

Buffalo of the Mississippi, *bubalus Mississippiensis*, is larger, and has a different appearance from that of the Ohio. They are taken in immense quantities in the meadows and lakes of the Mississippi, and greatly resemble the Atlantic shad.

Perch, *perca maculata*, is a fine fish, weighing from three to five pounds.

Bar fish, *perca argentea*, are taken with a hook. They go in shoals in the southern running waters. They weigh from one to three pounds, and are beautifully striped with brown and silver.

Drum, rock fish, sheep's head, &c., are large and fine fish, taken in the lakes on the Gulf of Mexico, that are partially mixed with salt water, and so saline, as not to be potable. They correspond in size to the cod and haddock of the Atlantic country; and are among the most common fish in the market of New Orleans.

Spade, or shovel fish, *platirostra edentula*, a mud fish of the middle regions of the valley, found in muddy lakes. They weigh from ten to fifty pounds, are without scales, and have in advance of their mouths, a smooth, bony substance, much resembling an apothecary's spatula, from six inches to a foot in length, and two or three inches in width. Its use, apparently, is to turn up the mud in order to find subsistence. They are extremely fat, and are taken for their oil. We have never remarked this fish in any museum, although to us the most strange and whimsical looking fish we have seen.

The pike of these waters is precisely the same fish, as is taken with that name in the Atlantic streams. A fine fish of this species, called *piccannau*, is taken in the Illinois and the upper waters of the Wabash.

We have seen one instance of a horribly deformed animal, apparently intermediate between the class *testudo*, and fishes. It was in a water of the Washita, and we had not a fair opportunity to examine it. It is called toad fish; has a shell, like a tortoise; but has the other aspects of a fish. It is said to be sufficiently strong, to bear a man on its back; and from the account of those, who have examined it, this animal must be a singular *usus natura*.

Alligator gar, a fish, shaped like a pike; but still longer, rounder and swifter. Its dart equals the flight of birds in rapidity. It has a long, round and pointed mouth, thick set with sharp teeth. Its body is covered with scales of such a texture, as to be impenetrable by a rifle bullet, and, when dry, to make fire with steel. It is a fish of most outlandish appearance, weighing from fifty to two hundred pounds. It is a terrible and voracious animal, biting asunder whatever it can embrace in its long mouth; and is to us, who have seen it in waters, where we bathed, a far more formidable animal, than the alligator. It is, in fact, the shark of rivers.

The fish of the gulf shore are of a very peculiar character,--being taken in shallow lakes, principally composed of fresh water, but having outlets into the gulf, through which, when the wind blows strongly from the south, the sea water is forced to such a degree, as that they become salt. The fish possess an intermediate character, between those of fresh and salt water.

Some of the kinds and sizes of the cat fish are fine for the table. The fishes of the Mississippi and its tributaries, generally, are tough, coarse, large and unsavory. The trout, so called, and the bar fish, are fine. The *piccannau*, perch, and other fish of the Illinois, are represented, as excellent; and in that river, they are taken in great abundance. A line, here called a 'trot line,' drawn across the mouth of the Illinois, where it enters the Mississippi, with hooks appended at regular distances, took five hun.

dred pounds in a night. We have taken in Big Creek, a water of the Washita, seventy-five trout in two hours with the hook. Except the trout, the small, yellow cat fish, the pike, the bar fish and the perch, the fish of the western waters are not much admired.

RIVERS. Under this head, we propose to describe the Mississippi only, reserving our description of the other western rivers, until we treat of the states and regions, in which they principally run. The Mississippi imparts a name and a character to the valley. It has been described with a frequency and minuteness, to give any new attempt at delineating it an air of triteness and repetition. But the very idea of this noble stream is invested with an interest and grandeur, which will cause, that a faithful account of it can never become trite or tedious. It is, in some respects, the noblest river in the world,—draining a larger valley, and irrigating a more fertile region, and having, probably, a longer course, than any other stream. Contrary to the general analogy of very large rivers, it bends from north to south, and traverses no inconsiderable section of the globe. It commences in many branches, that rise, for the most part, in wild rice lakes; but it traverses no great distance, before it has become a broad stream. From its commencement, it carries a wide expanse of waters, with a current scarcely perceptible, along a marshy bed. At other times its fishes are seen darting over a white sand, in waters almost as transparent as air. At other times, it is compressed to a narrow and rapid current between high and hoary lime stone bluffs. Having acquired in a course, following its meanders, of three hundred miles, a width of half a mile, and having formed its distinctive character, it precipitates its waters down the Falls of St. Anthony.—Thence it glides, alternately through beautiful meadows and deep forests, swelling in its advancing march with the tribute of an hundred streams. In its progress it receives a tributary, which of itself has a course of more than a thousand leagues. Thence it rolls its accumulated, turbid and sweeping mass of waters through continued forests, only broken here and there by the axe, in lonely grandeur to the sea. No thinking mind can contemplate this mighty and resistless wave, sweeping its proud course from point to point, curving round its bends through the dark forests, without a feeling of sublimity. The hundred shores, laved by its waters; the long course of its tributaries, some of which are already the abodes of cultivation, and others pursuing an immense course without a solitary dwelling of civilized man on their banks; the numerous tribes of savages, that now roam on its borders; the affecting and imperishable traces of generations, that are gone, leaving no other memorials of their existence, or materials for their history, than their tombs, that rise at frequent intervals along its

banks; the dim, but glorious anticipations of the future;—these are subjects of contemplation, that cannot but associate themselves with the view of this river.

It rises in high table land, though the country, at its source, has the aspect of a vast marshy valley. A medium of the different authorities, touching the point of its origin, gives it to be in latitude, $47^{\circ} 47'$. Travellers and authorities differ, too, in the name of the lake, or reservoir, where it is supposed to commence. Some name Turtle lake, and some Leech lake, as its source. The truth is, that in speaking of the source of the Mississippi, the Missouri, the Nile, and other great rivers, readers are only amused with fictions and names. Of a nameless number of tributaries, it would be impossible to say, which carried the most water, or had the greatest length of course, or best merited the honor of being considered the parent stream. A great number of streams, rising in the same plateau, and interlocking with the waters of Red River, and the other streams of lake Winnipeck, unite to form the St. Peter's and the Mississippi. Different authorities assign to these rivers such different names, that we should rather perplex, than instruct our readers, by putting down names as having more authority than others. The St. Peter's, the principal upper branch of the Mississippi, has been scientifically and faithfully explored by the gentlemen of Long's expedition. The St. Peter's receives ten or twelve tributaries, some of them considerable streams, before its junction with the Mississippi. The principal of these are called Spirit, Beaver, Yellow, Medicine, Red Wood, Aux Liards and Blue Earth rivers on the west side, and Miawakakong and Epervier from the east. The principal river of the west fork of the Mississippi is the river de Corbeau. The other fork, before its junction with the main river, receives Deer, Meadow, Swan and Savannah rivers. Below Cedar and Muddy rivers, between 45° and 46° , there are strong rapids. Between them and the falls, are Crow and Ruin rivers.

With the common propensity of travellers to exaggerate, the Falls of St. Anthony, until very recently, have been much overrated. Instead of the extravagant estimates of the French writers, or the fall of fifty feet assigned to them by more modern authorities; the real fall of the Mississippi here is between sixteen and seventeen feet of perpendicular descent. Though it has not the slightest claim to compare with that of Niagara in grandeur, it furnishes an impressive and beautiful spectacle in the loneliness of the desert. The adjoining scenery is of the most striking and romantic character; and as the traveller listens to the solemn roar of the falls, as it sinks into feeble echoes in the forests, a thrilling story is told him of the love and despair of a young Dakota Indian woman, who, goaded by jealousy towards her husband, who had taken

another wife, placed her young children in a canoe, and chanting the remembrances of love and broken vows, precipitated herself and her infants down the falls. Indians are always romancers, if not poets. Their traditions say, that these ill-fated beings, together with their canoe, so perished, that no trace of them was seen. But they suppose, that her spirit wanders still near this spot, and that she is seen on sunny mornings, carrying her babes in the accustomed manner, bound to her bosom, and still mourning the inconstancy of her husband.

Above the falls, the river has a width of five or six hundred yards. Immediately below, it contracts to a width of two hundred yards; and there is a strong rapid for a considerable distance below. Ninety miles below the falls, and between 44° and 45° , it receives Rapid and St. Croix rivers; the former from the west, and the latter from the east. The St. Croix is reputed to have a boatable course of two hundred miles, and rises in lakes not far from the waters of Lake Superior.

Near 44° , from the west, comes in Cannon River, a tributary, which enters not far above the northern extremity of Lake Pepin. This is no more than an enlargement of the river. It is a beautiful sheet of water, of some miles in length, and broadening in some places, from one to three miles in width. Nearly at its lower extremity, it receives the Chippeway from the east, with a boatable course of about an hundred miles. Between Lake Pepin and the parallel of 43° , come in three or four inconsiderable rivers, of which, Buffalo, Bluff and Black rivers, from the east, are the principal. Between 43° and 42° are Root, Upper Isaway and Yellow rivers from the west, and La Croix and Bad Axe rivers from the east.

Ouisconsin River comes in from the east, about the parallel of 42° , and near that very noted point on the river, Prairie du Chien. It is one of the most considerable tributaries above the Missouri. It has a boatable course of more than two hundred miles, and interlocks by a very short portage with Fox River, that empties into Green Bay of Lake Michigan. In its progress towards the Mississippi, this river receives nine or ten considerable streams. It is the liquid highway of passage for the Canadian traders, trappers and savages, from Mackinaw and the lakes to the immense regions of the Mississippi and Missouri. A little below this, comes in Turkey River from the west, and La Mine from the east. It is so named, from its traversing the country of the Illinois lead mines. Lead ore is dug here, at Dubuque's, and other lead mines, particularly on River du Feve, or Fever River, probably, with greater ease, and in more abundance, than in any other country. These mines are found on a range of hills, of which the *Smoky Mountains* are the highest points. On the opposite side, comes in *Tete de Mort*. A range of hills, that

stretches across the river towards the Missouri, is probably, all a country of lead mines; for we have seen beautiful specimens of lead ore, dug near the Missouri, where this range of hills strikes that river.

A little below the parallel of 41° , comes in from the west, the Wapissipinacou, a river of some magnitude and a considerable length of course. On the same side, a little lower down, comes in the Little Soutoux; and still lower from the east, comes in Rock River, a very considerable limpid and beautiful river, celebrated for the purity of its waters, and the fineness of its fish. The lands in its vicinity are fertile. Among its principal tributaries are the Kishwake and Pektanons. Near the entrance of this river into the Mississippi, is the United States' garrison, Fort Armstrong. This river, like the Ouisconsin, has an easy communication by a portage with Lake Michigan, and is considered boatable for a distance of two hundred and forty miles. Below this river are long rapids, and at low water, difficult for large boats to ascend. A little lower on this river, on the west side, comes in the Iaway, a stream of some magnitude. Below the parallel of 41° , come in from the eastern side, two or three inconsiderable streams. Near 40° , on the west side, and in the state of Missouri, comes in the Des Moines, the largest tributary from the west above the Missouri. It receives itself a number of considerable streams, and enters the Mississippi by a mouth one hundred and fifty yards wide. It is supposed to have a boatable course of nearly three hundred miles; and it waters a delightful country. On the opposite side, the waters, for a long distance, which rise near the Mississippi, flow into the Illinois. Between the Des Moines and the Illinois, come in from the west the Wacondah, Fabian, Jaustioni, Oahahah, or Salt River, Boeuf, or Cuivre and Dardenne rivers. These rivers are from fifty to an hundred yards wide at their mouth, and have boatable courses for some length.

In latitude 39° comes in the Illinois from the east,—a noble, broad and deep stream, nearly four hundred yards wide at its mouth, having a course of about four hundred miles, and boatable almost its whole distance. It is the most considerable tributary of the Mississippi above the Missouri, interlocking, at some seasons of the year, by one of its principal branches, the Des Plaines, with the Chicago of Lake Michigan, without any portage. On this river, and some of the streams above, the peccan tree is found in its utmost perfection.

A little below 39° , from the west comes in the mighty Missouri, which, being both longer, and carrying more water, than the Mississippi, and imparting its own character to the united stream below, some have thought, ought to have given its name to the river from the junction.

Below the Missouri, omitting the numberless and nameless small streams, that come in on either side, as we have omitted them above, we

shall only notice those rivers, that from their magnitude, or other circumstances, deserve to be named. The first river of any importance, that enters the Mississippi on the west side below the Missouri, is the Marmec, that comes in twenty miles below St. Louis, a little above the parallel of 38° . It is nearly two hundred yards wide at its mouth, and has a course, by its meanders, of two hundred miles.

Nearly in 38° , comes in from the other side the Kaskaskia, that runs through a most fertile and beautiful country in Illinois. It is eighty yards wide at its mouth, and has a course of nearly two hundred miles, great part of which, at some seasons of the year, is boatable. On the opposite side, enter two or three inconsiderable streams below St. Genevieve; on one of which is a saline, where considerable salt is made. Forty miles below Kaskaskia, comes in from the east Big Muddy. It is a considerable stream, remarkable for having on its shores fine coal banks.—Three miles below, on the west side enters Apple Creek, on which used to be a number of villages of Shawnees and Delawares.

Between 36° and 37° , on the east side, comes in the magnificent Ohio, called by the French, '*La Belle Riviere*.' It is by far the largest eastern tributary of the Mississippi. At the junction, and for an hundred miles above, it is as wide as the parent stream. From this junction, it is obvious, from the very long course of the Tennessee, that river running into the Ohio in a direction apparently parallel and opposite to the course of the Mississippi, that we cannot expect to find any very important tributaries to the latter river, for a considerable distance below the mouth of Ohio, on that side. We find, in fact, that the Yazoo is the only river, that enters from the east, which deserves mention as a river of importance. Kaskinompee, Reelfoot, Orbian, Forked, Deer and Hatchy are inconsiderable streams, that enter from the east, between the Ohio and the Chickasaw bluffs. Wolf River is of more importance, has a considerable length of course, and is fifty yards wide at its mouth.

On the west side, between 35° and 34° enters the St. Francis. It is two hundred yards wide at its mouth, and has a comparative course of four hundred miles; three hundred of which, on one of its forks, are considered boatable.

A little above 34° enters White River, rising in the Black Mountains, separating its waters from those of the Arkansas. It has a comparative course of twelve hundred miles, and enters by a mouth between three and four hundred yards wide.

Thirty miles below, and between 34° and 33° , comes in the Arkansas, —next to the Missouri, the largest tributary from the west. It enters by a mouth five hundred yards wide. Its waters, when the river is full, are

of a dark flame color; and its course, including its meanders, is commonly computed at two thousand five hundred miles.

Between 33° and 32°, a little above the Walnut Hills, in the state of Mississippi, enters from the east the Yazoo, a river, which rises in the country of the Indians, and passes through the state of Mississippi, entering by a mouth, between two and three hundred yards wide. Below the Yazoo, on the same side, Bayou Pierre, Big Black, Cole's Creek and Homochitto, enter the river.

Eighty miles below Natchez, and a little above 31°, on the west side enters Red River, which, although not generally so wide, as the Arkansas, probably, has as long a course, and carries as much water. Immediately below the river, the Mississippi carries its greatest volume of water. Even above Red River, in high floods, water escapes from the Mississippi on the west side, in a great many places, which never returns; but not in quantity to carry off as much, as Red River brings in. A league and a half below Red River, on the same side, is seen the first important bayou, or efflux, that begins to diminish, and convey to the Gulf of Mexico by its own separate channel, the surplus waters of the Mississippi. It is the Atchafalays, which, beyond question, was the ancient bed, by which Red River made its way to the gulf, without mingling its waters with the Mississippi. In high waters, it is now supposed to take off as much as Red River brings in.

Twenty leagues below, on the east side, comes in Bayou Sarah, the only stream of any importance, that enters below the outlet of Atchafalaya. Thence the effluxes receive all the waters, that rise near the Mississippi, and are continually diminishing its volume of waters. The next efflux, below Atchafalaya, is Bayou Manshac, or Iberville,—an outlet from the east bank, a little below Baton Rouge, through which, in high waters, passes off a considerable mass, through lakes Maurepas, Ponchartrain and Borgne, to the Gulf of Mexico.

At no great distance below, on the west side, is another considerable efflux, Bayou Plaquemine; and at some distance below Bayou La Fourche, a still more considerable outlet. Thence to New Orleans, the banks of the river are unbroken, except by crevasses. Below that city, there is no outlet of any importance, between it and the four mouths, by which the Mississippi enters the Gulf of Mexico.

It runs but a little distance from its source, as we have remarked, before it becomes a considerable stream. Below the Falls of St. Anthony, it broadens to half a mile in width; and is a clear, placid and noble stream, with wide and fertile bottoms, for a long distance. A few miles below the river Des Moines, is a long rapid of nine miles, which, for a considerable part of the summer, is a great impediment to the navigation.

Below these rapids, the river assumes its medial width and character from that point to the entrance of the Missouri. It is a still more beautiful river than the Ohio, somewhat gentler in its current, a third wider, with broad and clean sandbars, except in the time of high waters, when they are all covered. At every little distance, there are islands, sometimes a number of them parallel, and broadening the stream to a great width. These islands are many of them large, and have in the summer season an aspect of beauty, as they swell gently from the clear stream,—a vigor and grandeur of vegetation, which contribute much to the magnificence of the river. The sandbars, in the proper season, are the resort of innumerable swans, geese and water fowls. It is in general, a full mile in width from bank to bank. For a considerable distance above the mouth of the Missouri, it has more than that width. Altogether, it has, from its alternate bluffs and prairies, the calmness and transparency of its waters, the size and beauty of its trees, an aspect of amenity and magnificence, which perhaps, does not belong in the same extent to any other stream.

Where it receives the Missouri, it is a mile and a half wide. The Missouri itself enters with a mouth not more than half a mile wide. The united stream below has thence, to the mouth of the Ohio, a medial width of little more than three quarters of a mile. This mighty tributary seems rather to diminish, than increase its width; but it perceptibly alters its depth, its mass of waters, and what is to be regretted, wholly changes its character. It is no longer the gentle, placid stream, with smooth shores and clean sandbars; but has a furious and boiling current, a turbid and dangerous mass of sweeping waters, jagged and dilapidated shores, and, wherever its waters have receded, deposits of mud. It remains a sublime object of contemplation. The noble forest still rises along its banks. But its character of calm magnificence, that so delighted the eye above, is seen no more.

From the falls of St. Anthony, its medial current is probably less than two miles an hour, to the mouth of the Missouri; and from one point to the other, except at the rapids of the Des Moines, there is four feet water in the channel at the lowest stages. Below the Missouri its rapidity should be rated considerably higher, than has been commonly done. Its medial rate of advance is perhaps four miles an hour. The bosom of the river is covered with prodigious boils, or swells, that rise with a whirling motion, and a convex surface, two or three rods in diameter, and no inconsiderable noise, whirling a boat perceptibly from its track. In its course, accidental circumstances shift the impetus of its current, and propel it upon the point of an island, bend or sand-bar. In these instances, it tears up the islands, removes the sand-bars, and sweeps away the tender,

alluvial soil of the bends, with all their trees, and deposits the spoils in another place. At the season of high waters, nothing is more familiar to the ear of the people on that river, than the deep crash of a land-slip, in which larger or smaller masses of the soil on the banks, with all the trees, are plunged into the stream. The circumstances, that change the aspect and current of the river, are denominated, in the vocabulary of the watermen, chutes, races, chains, sawyers, planters, points of islands, wreck heaps and cypress bends. The divinity, most frequently invoked by boatmen, seems to have imparted his name oftener than any other to the dangerous places along the river. The Devil's race paths, Tea table, Oven, &c. are places of difficult or hazardous navigation, that frequently occur. They are serious impediments to the navigation of this noble stream which is never navigated safely, except with great caution. On the immense wreck heaps, where masses of logs, like considerable hills, are piled together, the numerous wrecks of boats, lying on their sides and summits, sufficiently attest the character of the river, and remain standing mementos to caution. Boats, propelled by steam power, which can be changed in a moment, to reverse the impulse and direction of the boat, are exactly calculated to obviate the dangers of this river.

No person, who descends this river for the first time, receives clear and adequate ideas of its grandeur, and the amount of water which it carries. If it be in the spring, when the river below the mouth of the Ohio is generally over its banks, although the sheet of water, that is making its way to the Gulf, is, perhaps, thirty miles wide, yet finding its way through deep forests and swamps, that conceal all from the eye, no expanse of water is seen, but the width, that is curved out between the outline of woods on either bank; which seldom exceeds, and oftener falls short of a mile. But when he sees, in descending the falls of St. Anthony, that it swallows up one river after another, with mouths as wide as itself, without affecting its width at all; when he sees it receiving in succession the mighty Missouri, the broad Ohio, St. Francis, White, Arkansas, and Red rivers, all of them of great depth, length and volume of water; swallowing up all, and retaining a volume, apparently unchanged, he begins to estimate rightly the increasing depths of current, that must roll on in its deep channel to the sea. Carried out of the Balize, and sailing with a good breeze for hours, he sees nothing on any side, but the white and turbid waters of the Mississippi, long after he is out of sight of land.

Touching the features of the country through which it passes, from its source to the falls of St. Anthony, it moves alternately through wild rice lakes and swamps, by lime stone bluffs and craggy hills; occasionally through deep pine forests, and beautiful prairies; and the tenants on its

borders are elk, buffaloes, bears and deer, and the savages that pursue them. In this distance, there is not a civilized inhabitant on its shores, if we except the establishments of Indian traders, and a garrison of the United States. Buffaloes are seldom seen below these falls. Its alluvions become wide, fertile, and for the most part, heavily timbered. Like the Ohio, its bottoms and bluffs generally alternate. Its broad and placid current is often embarrassed with islands, which are generally rich alluvial lands, often containing from five hundred to a thousand acres, and abounding with wild turkies and other small game. For one hundred miles above the mouth of the Missouri, it would be difficult for us to convey an idea of the beauty of the prairies, skirting this noble river. They impress the eye as a perfect level; and are in summer, covered with a luxuriant growth of grass and flowers, without a tree or a bush. We have made our way through them with difficulty on horseback, through grass and flowers as high as our head. At other times, we traversed hundreds of acres of a clean, short grass, of the character and appearance of the handsomest meadows, intended for the scythe. When this deep prairie skirts the river on one side, a heavy timbered bottom bounds it on the other. Generally from the slightest elevation on either side, the sweep of the bluffs, corresponding to the curves of the river, are seen in the distance, mixing with the blue of the sky.

Above the mouth of the Missouri, to the rapids of Des Moines, the medial width of the bottom valley, in which the river rolls, measured from bluff to bluff, is not far from six miles. Below the mouth of the Missouri, to that of the Ohio, it is not far from eight miles. The last stone bluffs of the Mississippi are seen, in descending about thirty miles above the mouth of the Ohio. Below these, commences on the Mississippi, as is seen on the Ohio for some distance above its mouth, the aspect of a timbered bottom on either side, boundless to the vision. Below the mouth of the Ohio, the alluvion broadens from thirty to fifty miles in width; still expanding to the Balize, where it is, probably, three times that width. We express these widths in terms of doubt, because three fifths of the alluvion, below the mouth of the Ohio, is either dead swamp of cypress forest, or stagnant lakes, or creeping bayous, or impenetrable cane brakes, great part of it inundated; perhaps, traversed in a straight direction from bluff to bluff, scarcely once in a year, and never explored except in cases of urgent necessity. The bluffs, too, are winding, swelling in one direction, and indented in another, and at least as serpentine as the course of the river.

Between the mouth of the Ohio and St. Louis, on the west side of the river, the bluffs are generally near it, seldom diverging from it more than two miles. They are, for the most part, perpendicular masses of lime.

stone; sometimes shooting up into towers and pinnacles, presenting, as Mr. Jefferson well observed, at a distance, the aspect of the battlements and towers of an ancient city. Sometimes the river sweeps the bases of these perpendicular bluffs, as happens at the Cornice Rocks and at the cliffs above St. Genevieve. They rise here, between two and three hundred feet above the level of the river. There are many imposing spectacles of this sort, near the western bank of the Mississippi, in this distance.

We may mention among them, that gigantic mass of rocks forming a singular island in the river, called the Grand Tower; and the Shot Tower at Herculanum.

On the eastern side in this distance, the bluffs diverge to a considerable distance from the river, and bound the American bottom, leaving an alluvial belt, divided into nearly equal divisions of timbered lands, and smooth prairies. This belt has a medial width of six miles, and is noted for the uncommon fertility of the soil. The bluffs mark the boundary between this belt and the hills. They are as high and as perpendicular as the bluffs on the opposite side of the river; and, although generally at a distance of five or six miles from its present channel, they bear the same traces of attrition by the waters, the same stripes, marking the rising and falling of the river, which are seen on the opposite side. These seem to be impressive indications, that the Mississippi once swept their bases.

Opposite the mouth of the Missouri, the American bottom terminates, and the bluffs come in to the river. The bluffs bound the eastern bank of the river, thence to the mouth of the Illinois. From these bluffs we contemplate one of the most impressive and beautiful landscapes in the world. On the opposite side, the mighty Missouri is seen, bringing its turbid and sweeping mass of waters at right angles to the Mississippi. The eye traces a long distance of the outline of the Missouri valley, bounded on either side with an indistinct and blue line of hills. Above, it is the vast and most beautiful Mamelie prairie, dotted with green islands of wood, and skirted at the farthest ken of the eye with hills and forests. Above you, on the same shore, is the valley of the Illinois, itself bounded by hoary and magnificent bluffs of a peculiar character. The river brings in its creeping waters by a deep bed, that seems almost as straight as a canal. You have in view the valleys and bluffs of two noble streams, that join their waters to the Mississippi. You see the Mississippi changed to a turbid and sweeping stream, with jagged and indented banks, below you. You see its calm and placid waters above the Missouri. On the opposite prairie, there are level meadows, wheat fields, corn fields, smokes ascending from houses and cabins, vast flocks of do-

mestic cattle—distinct indications of agriculture and improvement blended with the grand features of nature. There are clumps of trees, lakes, ponds, and flocks of sea fowl, wheeling their flight over them; in short, whatever of grandeur, or beauty, nature can furnish to sooth, and to enrapture the beholder.

From the mouth of the Ohio, the scene shifts, and the bluffs are generally nearest the eastern shore; though on that shore there are often twenty miles between them and the river. They come quite in to the river, which washes their bases, at the Iron Banks, the Chalk Banks, the First, Second and Third Chickasaw Bluffs, Memphis, the Walnut Hills, Grand and Petit Gulf, Natchez, Loftus' Heights, St. Francisville and Baton Rouge. In all this distance, bluffs are only seen in one place on the west bank—the St. Francis Hills.

From the sources of the river to the mouth of the Missouri, the annual flood ordinarily commences in March, and does not subside until the last of May; and its medial height is fifteen feet. At the lowest stages, four feet of water may be found from the rapids of Des Moines to the mouth of the Missouri. Between that point and the mouth of the Ohio, there are six feet in the channel of the shallowest places at low water; and the annual inundation may be estimated at twenty-five feet. Between the mouth of the Ohio and the St. Francis, there are various shoal places, where pilots are often perplexed to find a sufficient depth of water, when the river is low. Below that point, there is no difficulty for vessels of any draught, except to find the right channel. Below the mouth of the Ohio, the medial flood is fifty feet; the highest, sixty. Above Natchez, the flood begins to decline. At Baton Rouge, it seldom exceeds thirty feet; and at New Orleans, twelve. Some have supposed this gradual diminution of the flood to result from the draining of the numerous effluxes of the river, that convey away such considerable portions of its waters, by separate channels to the sea. To this should be added, no doubt, the check, which the river at this distance begins to feel from the re-action of the sea, where this mighty mass of descending waters finds its level.

Below the mouth of the Ohio, in the season of inundation, to an observing spectator, a very striking spectacle is presented. The river, as will elsewhere be observed, sweeps along in curves, or sections of circles, of an extent from six to twelve miles, measured from point to point. The sheet of water that is visible between the forests on either side, is, as we have remarked, not far from the medial width of a mile. On a calm spring morning, and under a bright sun, this sheet of water, to an eye, that takes in its gentle descending declivity, shines, like a mass of burnished silver. Its edges are distinctly marked by a magnificent out-

line of cotton wood trees, generally of great size, and at this time of the year, of the brightest verdure. On the convex, or bar side of the bend, there is generally a vigorous growth of willows, or young cotton wood trees of such astonishing regularity of appearance, that it always seems to the unpractised spectator, a work of art. The water stands among these trees, from ten to fifteen feet in height. Those brilliant birds, the black and red bird of this country, seem to delight to flit among these young groves, that are inundated to half their height. Nature is carrying on her most vigorous efforts of vegetation below. If there be wind or storm, the descending flat and keel boats immediately make for these groves, and plunge fearlessly, with all the headway they can command, among the trees. Should they be of half the size of the human body, struck fifteen feet from the ground, they readily bend before even a frail boat. You descend the whole distance of a thousand miles to New Orleans, landing at night in fifteen feet water among the trees; but, probably, in no instance within twenty miles of the real shore, which is a bluff. The whole spectacle is that of a vast and magnificent forest, emerging from a lake, with its waters, indeed in a thousand places in descending motion. The experienced savage, or solitary voyager, paddles his canoe through the deep forests, from one bluff to the other. He finds bayous, by which one river communicates with the other. He moves, perhaps, along the Mississippi forest into the mouth of White River. He ascends that river a few miles, and by the Grand cut off, moves down the forest into the Arkansas. From that river, he finds many bayous, which communicate readily with Washita and Red River; and from that river, by some one of its hundred bayous, he finds his way into the Atchafalaya and the Teche; and by that stream to the Gulf of Mexico, reaching it more than twenty leagues west of the Mississippi. At that time, this is a river from thirty to a hundred miles wide, all overshadowed with forests, except an interior strip of little more than a mile in width, where the eye reposes on the open expanse of waters, visible between the trees. Each of the hundred rivers, that swell the Mississippi, at the time of high waters, is more or less turbid. The Upper Mississippi is the most transparent of all of them in low water. But, during its floods, it brings down no inconsiderable portion of dark, slimy mud, suspended in its waters. The mud of the Missouri is so copious, as the water can hold in suspension, and is whitish in color, much resembling water, in which fresh ashes have been mixed. The river below the Missouri assumes the color of that river. The Ohio brings in a flood, compared with the other, of a greenish color. The mixing of the waters of the Upper Mississippi with the Missouri, and afterwards of the united stream with the Ohio, affords an amusing spectacle. The water of the Ohio is not much charged

with earth, even at its inundation; but is still perceptibly turbid.—The St. Francis and White rivers at their floods, are not much stained. The Arkansas, when high, is as turbid, and holds nearly as much mud in suspension, as the Missouri; and its waters have a bright reddish color, almost that of flame. Its Indian name, *Ozark*, implies Yellow River. Red River brings in a turbid mixture of the same thickness, but of a darker red. After it has received these two rivers, the Mississippi loses something of its whiteness. The hills far up the Missouri, Arkansas and Red rivers are washing down. Pillars on their sides, of gigantic dimensions, bright colors, and regular forms, where they have been composed of an indurated earth, or clay, that more strongly resisted the action of rains and descending waters, are left standing. We have seen and admired these mementos of the lapse of time, the changes, that our earth is undergoing, the washing of waters, and the influence of the elements. Lewis and Clark speak of these remains of dilapidated hills far up the Missouri, where they appeared in their grandest dimensions.

The Mississippi, then, may be considered, as constantly bearing beneath its waters a tribute of the finest and most fertile vegetable soil, collected from an hundred shores, hills and mountains, and transported from distances of a thousand leagues. The marl of the Rocky Mountains, the clay of the Black Mountains, the earth of the Alleghanies, the red loam, washed from the hills at the sources of the Arkansas and Red rivers, are every year deposited in layers along the alluvion of the Mississippi; or are washed into the Gulf of Mexico. We can have little doubt, that this river once found its estuary not far below the present mouth of the Ohio. It was, probably, then thirty miles wide, and grew broader quite to the Gulf. The alluvial country below, must then have been an arm of the sea. The different bluffs on its eastern shore, the Chickasaw Bluffs, Natchez, and the other hills, whose bases the river now washes, were capes, that projected into this estuary. The banks of the river are evidently gaining in height above the inundation. The deposits of earth, sand and slime, are not as equal in their layers, as we might suppose; but might, perhaps, be assumed, as depositing a twelfth of an inch in the annual inundation.

As soon as the descending mass of waters has swept over the banks, being comparatively destitute of current, and impeded, moreover, by trees and bushes, it begins to deposit a sediment of that mud and sand, which were only held in suspension by the rapidity and agitation of the descending current. It must be obvious, that the sand and the coarser portion of the mixture of earth will subside first; and that near the banks of the river will be the most copious deposition. We find, in fact, the

soil contiguous to the rivers most sandy. It becomes finer and more clayey, as we recede farther from the bank, until near the bluffs; and at the farthest distances from the river, the impalpable mixture gradually subsides, forming a very stiff, black soil, called '*terre grasse*,' and having a feeling, when wet, like lard or grease. Circumstances, such as eddies, and other impediments, resulting from the constant changes of the banks, may cause this earth in particular positions, to be deposited near the river. Where the banks have fallen in, and discovered the under strata of the soil, we often see layers of this earth directly on the shore. But the natural order of deposition is, first, the sand; next, the marl; and last of all, this impalpable clay, which would of course be longest held suspended.

This order of deposition accounts, too, for another circumstance appertaining to the banks of this river, and all its lower tributaries, that do now, or did formerly, overflow their banks. It always creates surprise at first view to remark, that all these rivers have alluvions, that are highest directly on the banks, and slope back like a natural glacis, towards the bluffs. There are a thousand points, between the mouth of the Ohio and New Orleans, where, at the highest inundation, there is a narrow strip of land above the overflow; and it is directly on the bank. But the land slopes back, and subsides under the overflow; and is, perhaps, twenty feet under water at the bluffs. This deceptive appearance has induced a common opinion, that this river, its tributaries and bayous, in their lower courses, run through their valleys on an elevated ridge, and occupy the highest part of their bottoms. The greater comparative elevation on the banks notwithstanding, we have not yet the slightest doubt, that the path of the river is, in fact, the deepest part of their basin, and that the bed of the rivers is uniformly lower, than the lowest point of the alluvion at the base of the bluffs.

One of the most striking peculiarities of this river, and of all its lower tributaries, has not often been a theme of observation, in describing it. It is the uniformity of its meanders, called in the phrase of the country, 'points and bends.' In many instances, these curves are described with a precision, with which they would have been marked off by the sweep of a compass. The river sweeps round, perhaps, the half of a circle, and is precipitated from the point, in a current diagonally across its own channel, to another curve of the same regularity upon the opposite shore. In the bend is the deepest channel, the heaviest movement of waters, and what is called the thread of the current. Between this thread and the shore, there are generally counter currents, or eddies; and in the crumbling and tender alluvial soil, the river is generally making inroads upon its banks on the bend side. Opposite the bend there is always a sandbar,

matched in the convexity of its conformation to the concavity of the bend. Here it is that the appearance of the young cotton wood groves has its most striking aspect. The trees rise from the shore, showing first the vigorous saplings of the present year; and then those of a date of two and three years; and trees rising in regular gradation to the most ancient and lofty point of the forest. These curves are so regular on this and all the rivers of the lower country,* that the boatmen and Indians calculate distances by them; and instead of the number of miles or leagues, they estimate their progress by the number of bends they have passed.

We have had occasion to remark this conformation, even on the upper courses of the Mississippi and Missouri; and that, too, where the curve seemed to have been scooped out of solid bluffs of lime stone. These sinuosities are distinguished on the lower course of the Ohio, on the St. Francis and White rivers, and they are remarkable for their regularity on the Arkansas. The curves on Red River are regular, but they are sections of circles comparatively small; and the river is so extremely crooked from them, that its course is generally obstructed from view in a length of two or three miles. All the bayous and effluxes of the Mississippi, and of these rivers, show the same conformation in their courses. A creole of the lower country would scarcely imagine, that a river could move on in any other line than in curves, described first upon one bank, and then upon the other.

There must be, beyond doubt, a general law for this uniformity of conformation; and we have heard various demonstrations, that were intended to explain it, and to show, that a moving mass of waters, on the principle of such a moving force, ought to sweep a curve in one direction, be propelled from the point of that curve, and then sweep a similar one on the opposite shore. These demonstrations have appeared unsatisfactory to us. It has always seemed to us, that in a tender and alluvial soil, and under similar circumstances, a moving mass of water, cutting a course for itself, would take the direction of a right line. The common solution certainly is not the just one, that is to say, that the river finds an obstacle, which gives it a diagonal direction in the first instance; and that this law, once established, continues to act with uniformity, in producing this alternation of curves. The courses of all the western rivers, in creating points and heads, are far too uniform to be produced by an accidental cause. It appears clear to us, that the deviations from this rule are owing to accidental causes; but they are so unfrequent, that for the first three hundred miles on the Arkansas, we do not remember one; and there are not more than three or four 'reaches,' as they are called, or deviations

from this rule, in the Mississippi, where the river for a considerable distance preserves a straight course between the mouth of the Ohio and the Balize.

It follows from this disposition of the river, to take its direction in deep curves, and continually to wear them deeper, that, returning, as it were, on its track, it will often bring its points near to each other. It occurs more than once, that, in moving round a curve of twenty-five or thirty miles, you will return so near the point whence you started, that you can return to the point in less than a mile. There are at present bends of this sort on the Missouri and the Mississippi, particularly at Tunica Bend where you move round a curve of thirty miles, and come back to the point, where you see through the trees, at the distance of three-quarters of a mile, the point whence you departed. It might be inferred, that it would so happen, when the waters on the upper point of the bend approach so near those on the lower point, that in high waters a crevasse would be made across the point, or the simple weight of the descending current would burst itself a passage through. In this case the river soon finds its main channel from point to point; an island is formed; and the river rushes through what is called the 'cut off,' with great velocity and power. Such is the 'Grand cut off,' that has been formed since we first descended the river. We now pass from one point to another, in half a mile, to a distance which it formerly required twenty miles to reach. The 'cut off' at *Fausse Riviere*, Yazoo, Homochitto, and Point Coupee, bends are of this sort. Tunica, no doubt, will soon be of the number; and many other bends. Wherever the trees are cleared away from the banks by cultivation, the soil becomes, of course, more tender and yielding, and is easier perforated by the mass of moving waters. Nature is thus shortening the course of this long river. In process of time the efforts of industry will yield their aid to the same result.

When these changes take place, the mouth of the ancient course of the river becomes choked; and long lakes are formed, called '*fausses rivières*,' which, at the season of high water, might easily be mistaken for the river itself, were they not without current, and did they not soon cover themselves with those aquatic plants that, in these climates, are always found on still waters. There are an infinite number of such bayous found on the lower courses of the Mississippi, Arkansas, and, more than all, Red River, where they form such an inextricable net work, that in high waters it requires an experienced pilot to determine which is the river and which is the bayou.

The thread of the main current is, as we have remarked, always near the bank of the bend; and the chief undermining of the banks is ordi-

harily there. As soon as the floods of the river begin to subside, and the waters to sink within the banks, the main thread of the current, which had been diminished in its action on the bank, by the diffusion of its waters over the bank, as soon as they return within the channel, acts with augmented force, and by a more uniform action from the surface to the bottom upon the banks, softened and diluted by the recent overflow. Hence, immediately upon the subsiding of the river within its banks, is the time when they are most apt to fall in. Then is the time that we hear by night the deep crash of the trees falling and sinking in the flood. Then it is that the land-slips carry in acres at a time; and it is then that the narrow passages between islands become choked with trees, carried along by the current.

With one remark more we shall close this outline of the Mississippi; which, minute as it may have seemed, is but a brief sketch of the character and circumstances of a river, which, described in detail, would occupy a volume. It is the most turbid river, and has the widest alluvial bottoms of any with which we are acquainted. We may add, that it is beyond all comparison the narrowest river, that we know, which carries so much water. In width and show of surface, it will hardly compare with the St. Lawrence. We have no doubt that it carries the greatest mass of water, according to its width, of any river on the globe. From the quantity of earth which it holds in suspension in its descending waters, and which it is continually depositing along its banks, it will always be confined within a narrow and deep channel. Were it a clear stream it would soon scoop itself out a channel from bluff to bluff. In common with most of its great tributaries, it broadens as it ascends, being, as we have remarked, wider above the mouth of the Missouri, with scarce a tenth of its water, than it is at New Orleans. In the same manner, Arkansas and Red River are wider a thousand miles from their mouth than they are at that point. As the western rivers approach their *debouche*, and increase their volume of water, they narrow and deepen their channel.

INDIANS, OR ABORIGINAL INHABITANTS. Details of the Indians, that belong to the states and territories of this valley, will naturally be given under the accounts of them. We mean here to bring, if it may be, into one group, general views and outlines of the race, as we see it in all the climates from the sources of the Mississippi to the Gulf of Mexico. Numerous and voluminous treatises have been written upon the subject. We have read these treatises. We have long and attentively studied the Indian character. We have seen enough of that character, to be aware, that very few writers have done more than theorize and declaim upon the subject. They have seldom brought to it the only true lights—

those of observation and experience. We ought to except from this remark, Charlevoix, among the early, and the gentlemen of Long's expedition among the recent writers upon the Indians. The views of the latter, in particular, are calm, philosophical and just, as far as they go. They do not give us the fruit of preconceived prejudices, or theorizing harangues; and we refer those who would take minute, interesting, and, for the most part, just views of the character and condition of the Western Indians, to their narratives.

The greater part of the Indians of the United States dwell in the limits of this valley. Within the bounds of Georgia, Alabama, Florida, Mississippi, and Tennessee, the southern Indians of this valley inhabit. These nations, without mentioning their subdivisions, are the Seminoles, the Baton Rouges, the Creeks, or Muskogee, the Cherokees, Chactaws, and Chickasaws. The Creeks and Seminoles, before the late war, were powerful tribes. Their population and power received, in that war, a withering check. Many of the Chactaws are incorporated with the Quawpaws of Arkansas. About a third of the Cherokee nation has emigrated to the country on the Arkansas, between the Quawpaws and the Osages. Many of the Creeks, or Muskogee, have emigrated west of the Mississippi. All these Indians that remain east of this river, have adopted more or less of cultivation, and the arts of civilized life. The Cherokees and Chactaws, particularly the former, have been most successful in imitating the habits and institutions of the whites. They have looms, ploughs, blacksmith's shops, slaves, enclosures, barns, taverns, brick dwellings in some instances, public roads, a census, a code of laws, civil divisions, and magistrates. Their laws have very little of that delay, of which the whites complain; but are severe, energetic, and promptly administered. They have many municipal regulations and singular customs; an amusing mixture of savage and civilized views, which afford a study of no common interest to the numerous travellers that are obliged to pass through their nations, on their way, by land, from New Orleans and the lower states of the Atlantic country. They have numerous taverns, at regular distances, not much inferior to those in the adjacent country, inhabited by the Americans. Some of their planters have large enclosures, and fine stocks of cattle and horses; and may be considered rich. We saw a Cherokee chief who had a dozen slaves, fine teams, ploughs and looms, two or three wives, and twenty-seven living children, as he stated. His people were dressed, as are most of these people, in plain cotton cloths of respectable fabric. The cotton, the dyeing articles, the manufacturing, and the whole fabric, from beginning to end, were within themselves. There are a number of respectable missionary establishments in their limits; and they begin to be deeply impressed with the

importance of education. They have been making great efforts to establish a printing press in their country, and it is now in operation.

In the northern parts of Ohio and Indiana, and near lakes Erie and Michigan, is an establishment of the Shawnese—a tribe formerly so powerful, and now hastening to decay. There was an important missionary station among them, which is removed to Michigan Territory. Ohio, that once contained such a numerous Indian population, is computed at present, to contain about two thousand, principally Shawnese. The Pottawatomies and Kickapoos, in Indiana and Illinois, are numbered, the former at two hundred and fifty, and the latter at six hundred. The Peorias, Kaskaskias and Cahokias, that figured so much in the early French history of this country, are nearly extinct. Most of these have removed, or are removing, west of the Mississippi. The Wyandots, Chippeways and Winnebagoes hunt farther to the northwest, and extend their range to Lake Superior. The Chippeways may be considered a patriarchal nation, of which many of the northern tribes are branches, and of whose language they speak dialects. There are other tribes so nearly extinct, that there are not now perhaps six individuals to maintain the name.

In ascending the Mississippi, from St. Louis, we meet first with the Sacks, or as they call themselves, Saukies, and Foxes, or Reynards.—They inhabit the country above and below Rock River, and claim the territory of the lead mines. They have recently made war, and been subjugated, and are also to remove west of the Mississippi. The Ioways reside farther up the river, and near the Des Moines. The Winnebagoes, or Puants inhabit from the Ouisconsin to Green Bay, on Lake Michigan. They have the reputation of being particularly false and treacherous. The Menomene, or *Folles Avoins*, inhabit the Menomene to Lake Michigan.

Still higher on the Mississippi, and thence to the lakes, and thence to the country on the Missouri, and fur up and down that river, wander the Sioux, or Dacotas. They are divided into six or seven tribes, with distinct names, given, as the French often fix appellations, from some poetical associations with natural objects. For instance, one of the most numerous tribes, inhabiting a region of forests, is called Was-pa-tong, *Gens des feuilles*, or the people of leaves. Each of these tribes has its distinct badge, coat of arms, or what is called 'totem' among them. They occupy a vast range, are a numerous people, and, like the Chippeways, the parent of various tribes, whose language, though radically the same with theirs, has, in process of time, receded so far from it, that the different tribes require an interpreter to converse together. The Dacotas are the Arabs of the West.

Surveying the country west of the Mississippi, and commencing the survey below St. Louis, between that town and the mouth of the Ohio there used to be a number of villages of Delawares and Shawnees; and with them were mixed a considerable number of renegadoes from the Creeks, and the Indians of the Lower Mississippi. There were in all three or four hundred souls. They left the country by an arrangement with the government. They have allied themselves with the Cherokees of the Arkansas.

In ascending the Missouri we first meet with the Osages, a powerful tribe who inhabit principally on the Osage River, and who spread themselves across the country to the Arkansas, and even to Red River.—Ascending the Missouri, we find, as we advance, Ottocs, Missouries, Ioways, Kansas, and Pawnees, divided into three bands—Grand Pawnees, Pawnee Republicans, and Pawnee Loups. After the Dacotas, or Sioux, they are, probably, the next most numerous people in this region. Still farther up, there are the Mandans, Puncabs, Omawhaws, Padoucas, La Plais, or Bald Heads, and the Tetons. Still farther up, there are the Minnitaroes, or *Gros Ventres*, the Arrapahoe, the Crow, the Aricaree, the Snake, and the Black Foot Indians. Some of these tribes inhabit, and hunt occasionally on both sides of the Rocky Mountains.

On the Arkansas the first tribe on its lower course is that of the Quawpaws, with whom are incorporated many Chactaws. Still higher, we meet with the Osages. The Cherokees, who have migrated to this river, seem to be a point of union for the ancient Shawnese and Delawares.—The Indians on the Ohio, of these tribes, are immigrating to this region. Above them are the Pawnees and Arrapahoes. At the sources of this river are often seen bands of the Mexican Indians, as the Comanches and Appaches, who come down from their mountains, to hunt the buffalo and elk on the adjacent plains.

From New Orleans to Attakapaa, and thence along Red River, are the remains of many of the ancient tribes of Louisiana, that will soon have no other memorial, than their names in the French histories of the country. These are the Natchez, the Appalachies, the Tensas, Alabamas, Pascagoulas, Chetimaches, Biloxies, Tunicas, &c. Near the Sabine are a small number of Carancoahs, clearly cannibals. They are viewed with horror, and pursued with a spirit of extermination, by the other Indians.

Higher on Red River, inhabit, and occasionally hunt, many of the tribes, which we have mentioned as having their more permanent home on the Arkansas. The Cadoes are a tribe that dwell chiefly on Red River, and hunt the buffalo on the prairies between it and Arkansas.—We might continue to swell this catalogue with the names of tribes, that once existed, but are now extinct; and others of which there remain, perhaps, a few individuals.

Population. Any exact estimates of the number of Indians, within the limits of the territory of the United States, must necessarily be wanting. The statistical tables rate them at one hundred and eighty thousand. We have before us a detailed table of the estimated numbers of Indians in the Mississippi valley. These tables give the names of sixty tribes; some of them of barbarous orthography, and sufficiently wide from the sounds of the names, by which these tribes choose to call themselves. The whole number is estimated at one hundred and three thousand. This, if we do not include the Indians west of the Rocky Mountains, of which we have no certain knowledge, is, probably, a large estimate.

The gradual decrease and extinction of these tribes, one after the other, has been a theme of copious and melancholy reflection with benevolent and thinking men. By an easy transition, they have passed to charging the cause, as a crime of the darkest dye to the whites, and to our country. A prevalent fashion and theme of declamation have their date, and their period, in our country; and for the time, that they are in fashion pass unquestioned. We have thought, the common, loose and bitter charges, which, in contemplating this subject, have been brought against our fathers and our country, ought at least to admit of question. We have always had individuals in our country, who would constantly avail themselves of the opportunity, to distribute among them the poison of ardent spirits. But our government, it must be admitted, has practised towards them a steady and dignified moderation, and an untiring forbearance. Its provisions, to prevent the sale of whiskey among them, have been severe, and in general, faithfully carried into effect. The strictness of our laws in this respect, is one of the most incessant themes of complaint on their part; and the manner, in which we withhold whiskey from them, is considered by them, as the result of our covetousness. Our government is exerting a constant effort, to hold the tribes leashed in, and to prevent them from destroying one another. Had it been our policy to exterminate the race, as it has been taxed, nothing more would have been necessary, than to unkennel the savages, excite their jealousies, stir up their revenge, and let them destroy each other.—But, on the contrary, it seems to have been the guiding maxim of the government, to do all practicable good, and to ward off all possible evil from this devoted and unhappy race.

In the ancient states, in the legislative halls, on the floor of Congress, from the pulpit and the press, it has been the favorite theme of eloquence, and the readiest passport to estimation for philanthropy and benevolence, to bring up the guilt of having destroyed the past race of this people, and of having possessed ourselves of their lands. One would think, it

had been discovered, that the population, the improvements, and the social happiness of our great political edifice, ought never to have been erected in place of these habitations of cruelty. Let us pity them. Let us practice forbearance to the end. Let us send to them instruction, Christianity, and the arts. They are not the less objects of our pity, and of our untiring benevolence, because the causes of their decay and extinction are found in their own nature and character, and the unchangeable order of things. It is as unchangeable as the laws of nature, that savages should give place to civilized men, possessed of the strength, spirit and improvement of the social compact. We conceive, that it is not altogether owing either to the proximity of the whites, to ardent spirits, or small pox, that the Indian tribes are constantly diminishing. The ten thousand mounds in this valley, the rude memorials of an immensely numerous former population, but to our view no more civilized, than the present races, are proofs, that the country was depopulated, when white men first became acquainted with it. If we can infer nothing else from the mounds, we can clearly infer, that this country once had its millions. We dig up their pottery, where we make our corn fields. We dig up their bones, when we level these mounds. They were, beyond doubt, a very rude people, and very laborious. Where are they now? Their places are occupied by a race, who were depopulating in their turn, when our forefathers first saw the country. We have no other grounds, on which to charge them with the guilt of having destroyed the generations that are buried in these mounds, than the circumstance, that when we first knew them, they were engaged, as they are now, in constant and interminable wars with each other. Who of them owned the land, that we now inhabit? The races that lie buried and forgotten on these plains; or the tribes that advanced to-day, to dispossess the present occupants, to be dispossessed in their turn by another race? We firmly believe that all ideas of property in the lands, over which they roamed after game, or skulked in ambush, to kill one another,—all notions of a local property in these possessions, have been derived from seeing the value, which lands acquire from the occupancy of the whites. It is out of all question, that ages before they had seen white men, they were divided, as now, into an hundred petty tribes, engaged, as but for the interference of our government, they would now be in endless and exterminating wars, in which they dashed infants into the flames, drank the warm blood of their victim, or danced and yelled round the stake, where he was consuming in the fire. If they found the country that pleased them, full of game and unoccupied, they fixed themselves there peacefully. If occupied, they made upon the occupants a war of extermination. When their desires or caprices prompted them to wander to another region,

they left nothing, but bark hovels, and a country, where game had become scarce, for one, where they could make new hovels, and find game plenty. War was their amusement, prompted by their instinctive appetite.

It is no crime of the present civilized races, that inhabit these regions, that their forefathers came over the sea, and enclosed lands, and cut down trees, where the Indians had hunted and fought. If they will not, and cannot labor, and cultivate the land, and lead a municipal life, they are in the same predicament with a much greater number of drunkards, idlers and disturbers of society, who are a charge and a burden upon it, in all civilized communities. Like them, they ought to be treated with tenderness; to be enlightened and reclaimed, if possible; and, as far as may be, to be restrained from hurting us, and each other. But it is surely as unjust, as it is preposterous, to speak of the prevalence of our race over theirs, as an evil; and from a misjudging tenderness to them, do injustice to our own country, and the cause of human nature.

They are evidently depopulating, not only in the proximity of our people, but in regions too remote, to be effected by our contiguity. Such is the case, as Pike and Long's exploring party, and the Spanish remark, in tribes so remote from our borders, as scarcely to have heard of our government. There are, however, exceptions to this rule. The Cherokees and the Chactaws increase in the country east of the Mississippi, almost in a ratio as great, as that of our people. It is earnestly to be wished, that this standing and conclusive proof of the advantage of our habits over theirs, will not be without its impression upon the other tribes. But it is much to be feared, that do what we may, all our schemes of benevolence to preserve them, as a distinct race, will prove abortive; and that they will soon be known only in history.

As we have remarked, some writers number sixty different tribes in this valley. They are scattered over an immense extent of country. They inhabit a great variety of climates. They speak different languages. They live on different kinds of food. There are differences of stature; and tribes of savages larger and smaller, than the ordinary stature of whites. There are differences of character, sensibility, intellect, standards of opinion and morals, and very different usages; and yet, take all the varieties of the races in the different climates into one view, and there is, probably, a greater physical and moral resemblance among them than is seen among the inhabitants of any other region on the globe. Persons, who have seen the Chippeways of the north, or the Cados of the south, have observed fair samples of the Indians over all this valley.

In stature, some tribes exceed, and some fall short of the medial stature of our people. The Dacotas, the Osages, and generally the savages of the middle regions of the Missouri, are something taller than our

people. The same may be observed of the Cherokees. The Shawnese and Delawares, and the Indians of the lakes and the Upper Mississippi, appear to us to be shorter than the whites. Their complexion is generally designated by the term, 'copper colored.' It does not convey an exact idea of the complexion of the 'red skins.' It is something darker than untarnished copper, and perhaps nearer the color of well smoked bacon. We have seen full blooded Indians, both of the north and of the south, but more frequently in the latter climate, as black as ordinary negroes. But, though the dark tinge was as intense, there is a shade of difference which the eye catches, and language cannot, between the black visage of such an Indian, and a negro. Take the tribes together, there is little difference between the complexion of the northern and southern Indians. The same unchangeable tinge is visible even in the new born children.

There is no part of their external appearance, that more strongly distinguishes them from all other people, than their hair. It is always, in all their tribes, and under all circumstances, and in each of the sexes, black, until changed by age. But, contrary to all that has been asserted on this subject, we have seen an hundred instances where they were gray. The hair is generally described by another term, which, perhaps, does not raise very distinct impressions. It is said to be lank. There is a peculiar aspect in an Indian tress, which only speaks to the eye. It hangs in knots, which have a peculiar feeling, and look as though greased, which it probably is. It is much finer than the hair of the horse's mane, but in other respects resembles it. In mixtures with the whites, this singular and characteristic appearance of the hair, described with difficulty, but, when once seen, always remembered, remains distinctly visible to the third generation.

They are generally erect, and of fine forms, with few instances of anomalous decrepitude and deformity. This, probably results, partly from the manner in which the children are reared, unswathed, unspoiled by indulgence and mismanagement of misguided fondness; but more, perhaps, to the circumstance, that feeble children, weak from deformity or want of natural vigor, cannot endure the first hardships, with which nature salutes these frail beings on the threshold of existence. Nature cries aloud to them, as Volney has said it, 'be strong, or die;' and only the hardy and well formed survive. They have cleaner limbs, not so muscular, and bodies with less tendency to corpulence, than the whites. Corpulent Indians are very rare; but we have seen two or three full blooded Indians as corpulent, as the best fed burghers of our cities. The legs, both of the male and female, have a remarkable curve, still more distinguishable, than that of the negro. In walking, they are re-

markable for placing one foot in a right line before the other, and seldom turn their toes from that right line. In this way they instantly discover the track of their own people, as distinct from ours. They walk, too, the one directly behind the other, in what is called Indian file. We have often seen the husband and wife, the mother and daughter, the father and son; and even two equal aged young men, walking together, engaged apparently in earnest conversation; but never advancing abreast. The one is directly behind the other. Their senses are entire, acute, and their are few anomalies from the general analogy of human conformation.

The forehead is broad, and almost invariably retiring in a small degree. We scarcely remember to have noticed a projecting forehead. The nose is prominent, and the base of the nostrils has a remarkable expansion; and in the male, it is more commonly aquiline, than otherwise. The lips are intermediate, between the common thinness of the whites, and thickness of the negroes. The cheek bones are high, and marked; and the face, in the line below the eyes, uncommonly wide,—and on this part of the face is strongly impressed the contour, that marks the Indian variety of the human countenance. The eyes are almost invariably black; but of a shade of blackness, very distinct from what we call such in the whites. We have the black eye of Italians and Spaniards, which has a color and expression, unlike the black eye of the Indians.—There is something in their gait, too, apart from the crookedness of their legs; their dress, or their manner of placing their feet the one before the other, which enables us, at a great distance, to distinguish an advancing Indian from a white.

The squaw has a distinctly female conformation, and a delicacy of rounding in the limbs, as distinct from the harsher and more muscular and brawny form of the male, still more strongly marked, than in our race. It seems a refutation, directly in point, of the system of those female philosophers, who have asserted, that the frailer form of the female was only owing to their want of exposure, and the early gymnastic habits of the male. It is notorious, that the squaws are the drudges, the animals of burden, among this race, from their infancy. But they have the female delicacy of limb, and contour of joint, and slenderness of hand and foot, notwithstanding as distinctly marked, as if they had been reared in indolence and luxury. The legs have the same curve with those of the male. We have scarcely seen an instance where the female face was not broad and oval. The nose is flattened, scarcely ever aquiline, and for the most part resembles that of the negro. They have a much greater uniformity of face, in this respect, than the male. The effluvia effused from their bodies, both male and female, when in high perspira-

tion, has been often remarked by observers to be less disagreeable, than that of other races, in similar circumstances. Some have supposed this to arise from their almost universal use of unguents from fragrant herbs; others, that they have a less copious and disagreeable perspiration. Be the cause what it may, all people who have been much among the Indians, agree in the fact.

In their moral habits, although no people on the globe will endure severer privations, will be more active, or travel farther, or hunt longer, or perform more incredible exploits of activity and daring, in their wars and in the chase, they must still be pronounced, on the whole, a lazy people. They often pass from the extremes of travail and toil to the most perfect indolence. Like their dogs, they will scour their thickets all day in the chase; and like them, as soon as their toils are suspended, they sink either to sleep, or a dozing and half unconscious existence. The history of the life of a warrior, is a history of these constant alternations. But the idea of the steady and unremitting industry of the whites is intolerable to them. The history of the Indians, from the beginning, is full of this fact. The Spaniards could never bring the Indians of the islands to the steady labors of agriculture. They have been a thousand times enslaved in North America; but the instance is scarcely on record, where an Indian, male or female, became a diligent slave. With them the stimulant effect of the chase, fostered by early training, and associated with the idea, that success in it confers the next honors to those of war, and is one of their means of existence; or the still higher excitements of ambition and revenge; goading them to war, are the only adequate motives to overcome their natural indolence. Their excitements removed, the vagrant propensities of a life without object or pursuit, are with them an overwhelming instinct, in opposition to daily and unremitting industry. Extreme avarice in those, who have become successful cultivators, has supplied a motive of sufficient energy to induce them to mental exertion, in order to procure slaves. But wherever we have passed fields contiguous to Indian villages, the mean and miserable enclosures, the maize planted out of rows, and crowded together at unequal distances; in short, the whole appearance of their cultivation was sufficiently indicative of Indian character, that labor was their strange work, and that even their more industrious women and children were but poor and careless cultivators.

In regard to their moral character and dispositions, their modes of existence, their domestic habits, their amiableness or unamiableness, different writers have taken very different views. Some have extolled their condition, as comprising the highest felicity of human existence; and their manners and morals as the utmost perfection of human nature.

Such were the dreams of Rosseau; and, under the pen of Chateaubriand, they were transformed into a kind of amiable and happy Arcadians.—Volney described them from observation; and the little that he has said of them shows great exactness, and depth of research, and describes more of the real character and condition, than whole volumes written by others. Heckowelder had lived with a particular tribe, had identified his feelings, and almost his affections with them and their interests. Having a very narrow circle of observation, every thing in that circle became magnified out of proportion. Their dim, and, probably, fabulous traditions, were, to him, matter of sober history. His views of them do more credit to the benevolence of his heart, than to the discriminating powers of his mind; and are not exactly the data on which a philosopher would form his opinions of the Indian character. About the character scarcely any two writers have been agreed; and we have accounts of them almost diametrically opposite. Charlevoix was one of the first observers of the savages of Canada and the West. He saw them too, under circumstances favorable for the development of their real character; before their manners were sophisticated, or altered by communication with the whites.—He has given us, perhaps, the most faithful account of the savages that has been given. It accords with the views that they have presented to us at the present day. On the whole, his picture is that of a race, taken as a whole, neither amiable nor happy. We cannot expect to settle the collisions of opinion upon this point. The brevity of our limits confines us to a few passing remarks. We shall give some of their general traits, such as appear to us to be common to the race, and of which all that have been extensively acquainted with Indian character and manners will acknowledge the fidelity.

As a race, they have countenances that are generally unjoyous, stern, and ruminating. It is with them either gloomy taciturnity, or bachana-
lian revel. When you hear Indians laughing, you may generally infer, that they are intoxicated. An Indian seldom jests; generally speaks low, and under his breath; and loquacity is with him an indication of being a trifling personage, and of deeds inversely less, as his words are more. Even the young men and the boys have a sullen, moody and thoughtful countenance; and seem to have little of that elastic gaiety, with which the benevolence of Providence has endowed the first days of the existence of most other beings. From this general remark, we ought, perhaps, to except the squaw, who shows some analogy of nature to the white female. She has quicker sensibilities, is more easily excited; and when out of sight of her husband, or her parents, to whom these things are matters of espionage and of after reprehension, she laughs and converses, and seems conscious of a pleasurable existence.

The males evidently have not the quick sensibilities, the acute perceptions of most other races. They do not easily or readily sympathize with external nature. None but an overwhelming excitement can arouse them. They seem callous to all the passions, but rage. The instances, that have been given in such glowing colors, of their females having felt and displayed the passion of love towards individuals of the whites, with such devoted constancy, have, no doubt, existed. But they were exceptions—*anomalies* from the general character. We have seen fathers in their cabins caressing their children; but even their caressing was of their customary moody and stern character, and as if they were ashamed to do it. They are apparently a sullen, melancholy and musing race, who appear to have whatever they have of emotion, or excitement, on ordinary occasions, going on in the inner man. Every one has remarked, how little surprise they express for whatever is new, strange, or striking.— Their continual converse with woods, rocks and sterile deserts, with the roar of winds and storms, and the solitude and gloom of the wilderness; their apparent exile from social nature; their alternations of satiety and hunger; their continual exposure to danger; their uncertain existence; their constant struggle with nature to maintain it; the little hold, which their affections seem to have upon life; the wild, savage and hostile nature, that incessantly surrounds them;—these circumstances seem to have impressed a steady and unalterable gloom upon their countenances. If there be here and there among them, a young man, who feels the freshness and vivacity of youthful existence, and shows anything of the gaiety and volatility of other animals in such circumstances, though otherwise born to distinction, he is denounced, as a trifling thing; and the silent and sullen young savage will naturally take the place of him. They seem to be born with an instinctive determination, to be, as much as possible, independent of nature and society, and to concentrate, as much as possible, within themselves an existence, which at any moment they seem willing to lay down.

▀ Their impassible fortitude and endurance of suffering, their contempt of pain and death, invest their character with a kind of moral grandeur. It is to be doubted, whether some part of this vaunted stoicism be not the result of a more than ordinary degree of physical insensibility. It has been said, with how much truth we know not, that in amputation, and in other surgical operations, their nerves do not shrink, or show the same tendency to spasm, with those of the whites. When the savage, to explain his insensibility to cold, called upon the white man to recollect how little his own face was affected by it, in consequence of constant exposure, the savage added 'my body is all face.' This increasing insensibility, transmitted from generation to generation, finally becomes

inwrought with the whole web of animal nature, and the body of the savage at last approximates the insensibility of the hoofs of horses. Considering the necessary condition of savage existence, this temperament is the highest boon of Providence. Of course no ordinary stimulus excites them to action. Few of the common motives, excitements or endearments operate upon them at all. Most of the things that move us, they either do not feel, or hold in proud disdain. The horrors of their dreadful warfare; the infernal rage of their battles; the demoniac fury of gratified revenge; the alternations of hope and despair in their gambling, to which they are addicted, even beyond the whites; the brutal exhilaration of drunkenness;—these are their pleasurable excitements. These are the things that awaken them to a strong and joyous consciousness of existence. When these excitements arouse the imprisoned energies of their long and sullen meditations, it is like *Æolus* uncaging the whirlwinds. The tomahawk flies with un pitying and unsparing fury; and the writhing of their victims inspires a horrible joy. Let the benevolent make every exertion to ameliorate their character and condition. Let Christianity arouse every effort to convey her pity, mercy and immortal hopes to their rugged bosoms. But surely it is preposterous to admire the savage character in the abstract. Let us never undervalue the comfort and security of municipal and civilized life; nor the sensibilities, charities and endearments of our own homes. The happiness of savages, steeled against sympathy and feeling, at war with nature, with the elements, and with each other, can have no existence, except in the visionary dreaming of those, who never contemplated their actual condition.

It is curious to remark, that different as are their standards of opinion from ours, in the main they have much the same notions of a good and respectable man, that we have. If we mark the passion for military display among our race, and observe what point is assigned by common feeling as well as history to military prowess, we shall hardly consider it a striking difference from our nature, that bravery and daring, command the first place in their homago. Their whole training, from their first to their last hour, inculcates the maxim, that courage is everything. But apart from these views, the traits of character, that entitle a man to the appellation of virtuous and good among us, have the same bearing upon the estimation of the Indians. In conversing with them, we are struck with surprise, to observe how widely and deeply the obligations of truth, constancy, honor, generosity and forbearance are felt and understood among them.

It has been often observed by foreign writers, and the sentiment has been echoed by philosophers of our own country. that they were

less subject to desire, and that the sexual propensities were weaker in their race, than in ours; and they have evidenced the want of beard in the males, as a physical proof. The Indians are as particular, as the Parisians, not to depart from their own modes and fashions. But we have occasionally seen a savage, who had the courage or the affectation to be singular, and such a person has a beard, that would do credit to an Oriental. It is well known, that one of the most general and troublesome employments of the young Indians is, to pull out the starting crop of beard with tweezers. We know not if their beard would grow naturally as abundant, as that of the whites. But if it would not, it is unquestionably owing to other causes, than want of natural vigor. Labor, a diet often meagre from necessity, exposure, and the indulgence of passions of a deeper character, as ambition, vindictiveness and the appetite for war, would probably weaken, if not extinguish, in whites, passions, which are fostered in indolence, plenty and repose. But when savages are placed in situations favorable to the development and indulgence of animal desires, we have seen no indications that they are feebler, or less intense in them, than in the whites. When we look upon the wild and naked elements, upon which, in some sense, their children are cast; when we consider how unfavorable is their situation for rearing children, we are astonished, at seeing so many in their cabins. Of the squaws, that we have seen, of mature age, a very great proportion of them had their babe, either swinging in its bark cradle, suspended between two trees; or if the mother was travelling, hung to her back by the usual strings, passed over her shoulders, compressed to her back by a bark cage, not unlike the shell of a tortoise. Its copper colored nose is seen peeping from this cage, like that of a tortoise from its shell; and even the infants seem to feel, that crying is to no purpose; and its note of grief is seldom heard.

It is to be lamented, that the intercourse of the whites among them has been calculated to convey any impressions of them, rather than those of the philosophers, to whom we have spoken. Numberless fatal cases of jealousy are recorded of their young warriors, in reference to the deportment of our people towards their women, while among them. The manners of our people, in this intercourse, have too often been an outrage upon decency and humanity. There are but few tribes, among whom the passing American sojourner, if he have any respectability of appearance, does not receive the offer of a daughter, or perhaps the wife of his host, as a temporary companion. Almost every American trader and resident among them has an Indian wife; and but too often, wives in the region which they left. In Long's first expedition an instance of this sort is recorded, of the deep and devoted constancy of affection on the

part of the young Indian wife, and thrilling proofs of the struggle between maternal and conjugal affection. The whole story is characteristic; and reflects as much honor upon the Indian wife and mother, as it does shame and contempt on the base and cold blooded perfidy of the American husband.

In all the Indian tribes, they have contrived to emulate the most polished and civilized people in the extent of prostitution, practised among them; and the degraded subjects have the same estimation in the one country and the other. Unnatural vices, fornication and adultery, prevail among many of the tribes, no doubt, to a great extent; but taking into view the opportunities in the solitude of the desert, the smallness of their societies, and the diminished influence of opinion, that results from it; taking into view, that they have no laws, but indefinite opinion, no religion, and no visible restraints,—the state of morals, in these respects, is far purer, than would naturally be expected. Instead of admiring, that these vices are practised among them, but, perhaps, not to a greater degree, than in civilized countries, it is, to a thinking mind, matter of astonishment, that there is so much decorum and restraint, in these respects, as there is. We feel constrained, too, to place this decorum among themselves, and that astonishing delicacy, with which they deport themselves towards white females that fall into their power, to a more honorable cause, than the destitution of passions. When we have passed various Indian tribes encamped near together, in company with ladies, we have observed the same manners, and the same indications of what was passing in their minds that we should expect to see in untrained and low people among ourselves; nor have we ever believed for a moment, that the propensities of nature are not as strong, under similar circumstances, in them, as in us.

There are different standards of morals among them, as there are among the white nations. With some tribes, adultery is a venial offence; and in others, it is punished with mutilation, death, or the handing over the degraded female to the males of the tribe. The instance of a young squaw, who is a mother before marriage, is a very uncommon occurrence; nor have we as much faith as others, in their adroitness at procuring abortion. In the case of a young Indian woman the fact of pregnancy could not be hidden.

The modes of managing marriage are as various, as among the whites. If there be any prevalent custom among the tribes, it is, that the parents manage the matter; and the young warrior in the morning finds the squaw, elected by the parents, sitting in his quarters, with whatever she is expected to bring, as a dowry, removed with her. It sometimes, but not often, happens, that he enters his dissent, and she returns with her

baggage to her mother. It is an universal custom to marry as many wives, as the warrior or hunter pleases. This is an affair, accurately prescribed by custom. If a young hunter has been for a length of time very successful in hunting, like a rich Turk, he is authorized by opinion to take as many wives, as he has proved himself able to maintain.

Jealousy in this case, and in all other cases, shows itself under the same forms, which it would naturally assume among our people. In Long's first expedition, we have a very amusing account of the manner, in which a wife deports herself, when her husband happens to manifest a greater fondness for another wife. Sometimes the favorite, to avoid her tongue, teeth and nails, flies with her husband to the campaign or hunt. At others, in dread of her life, she returns to her parents. When the two wives quarrel, whatever be the taciturnity of the husband, there is no want of words between the wives. The husband, squat on his hams, with his pipe in his mouth, his head half covered, and his eyes half closed, affects to be dozing, while they rate each other. If the contest of words goes on to blows, as is often the case, he arises with the stern air of a judge, and parts them, with a manner, that indicates which is the favorite. The wives generally find one lodge too narrow for both to inhabit together. The Indian spends his time, perhaps, in equal portions between them. But if he happens to spend more time with the one than the other, when he returns to the neglected wife, she manifests her view of the case by kicking his dog, throwing his food on the ground, and admitting him with great frankness into her thoughts of him and his favorite. The more our species are studied, the more clearly it is found, that the human heart is every where the same.

It is beyond all question, that some of the tribes now occasionally practise cannibalism; and that before the new world was visited by the whites, it was a custom generally, if not universally prevalent among them. The imperceptible influence of the horror, with which this practise is regarded by the whites, has made its way among them; and, little as they are disposed to confess, that they are swayed by our opinions, the earnestness with which they deny the existence of the practise at present in their tribes, and with which they attempt to vindicate their ancestors from the charge, is an incontestible admission of the influence, which our opinions exercise over them.

It would extend these remarks beyond our object, to give extensive and general details of Indian manners and modes of life. An important era with the youth of all the tribes is, that when they pass from minority to the duties and estimation of warriors and hunters. This period is celebrated with great solemnity. It is well known, that hunting is the serious business, and war the important amusement and pleasure of their

lives. The manner, in which they conduct these pursuits, is sufficiently well known. Their modes of constructing their habitations vary, according as they dwell in a country of forests or prairies, or northern or southern climate. Although in the very few instances, in which the savages have become cultivators in good earnest, they may have constructed good houses, the far greater portion aim at nothing more, than the frailest and rudest cabin. Yet in the construction of these, there are the same differences, as are seen in the cabins of the backwoods men. Some are extremely rude; and some are framed with ingenious and persevering reference to comfort and utility. The same differences are visible in the internal arrangement and keeping of the cabin. In most instances the interior is filthy and uncomfortable, beyond the endurance of any but a savage. We have been in others, where the neatly matted floor, or the earth covered with the fresh verdure of the palmetto, and the neatness of all the accompaniments, gave the scene such an air of comfort, as created a train of pleasant associations with the place.

Like all ignorant people, unable to trace the relation between results and causes, they are beyond all other people superstitious. It may be laid down, as an universal trait of the Indian character. The warrior, who braves death a thousand times, and in every form in the fury of battle, carries with him to the combat a little charmed bag of filthy and disgusting ingredients, in which he places no little reliance, as security against the balls and arrows, that are fired upon him. They are much addicted to faith in dreams. One of the dreamers, the day before alert, confident and intrepid, awakes the next morning, subdued and timid. He paints one side of his face black. He subjects himself to the most rigorous abstinence and fasting. Nothing can induce him to indulge or taste food, until the interdiet has passed away. He has dreamed an unfavorable dream. Such astonishing hold have these dreams upon their mind, that a warrior has been known to assume the dress, the duties, the drudgery, and what is infinitely more humiliating to an Indian, the estimation and standing of a squaw, in consequence of one of these dreams.

This great tendency to superstition in an Indian mind, furnishes strong inducements to ingenious and bold imposters among them, to assume the character of jugglers, quacks, medicine men and prophets. Our country had a terrible proof of the efficacy of this assumption, in the case of the 'Shawnee prophet,' and inferior men of the same character, during the late war. A chief among the savages of the Missouri, exercised, through the influence of fear, a long and severe authority over Indians, by whom he was abhorred. He had a medicine bag of terrible efficacy; and his enemies fell on his right hand and on his left. It was a received opinion in his tribe, that his wish had a withering and fatal influence on whom-

soever he directed it. After his death, his grand medicine was found to be arsenic.

Every thing with them, of great efficacy and power, that is inexplicable, is a 'medicine;' and the medicine men among them have the next degree of consideration to chiefs and noted warriors. We have conversed with Indians, who were atheists, and treated as fabulous, all notions of the immortality of the soul; and defended their opinions with as much ingenuity, as abandoned people of the lower orders among ourselves, who profess to hold the same opinions. But in some shape or form, almost all savages admit the being of a God, and the immortality of the soul. The Great Spirit is termed in many of their languages, '*Wahcondah*,' or Master of Life. Storm and thunder are manifestations of his wrath; and success in war and hunting, of his favor. Many of the tribes have forms of prayer, in the use of which they are regular and earnest, particularly when starting on expeditions of hunting or war.—Their prophets occasionally give out, that they have had communications with this Spirit, who has made himself visibly manifest to them, in the form of some bird or beast; and they paint their faces black, and observe great mystery on the occasion; and thence derive their pretensions to prophecy, and to be treated with the deference of 'medicine men.' Their notions of the condition of departed spirits are such, as we might expect from their character and condition. In some distant regions of a southern temperature, they place the home of the worthy departed in the country of 'brave and free' spirits, who pass to that country of game and good cheer, over a bridge scarcely wider than a hair, suspended over a yawning gulf. They, who have firm hearts and feet, and unblenching countenances,—that is to say, who were good warriors in life, pass safely over the bridge; while the timid and trembling fall into the gulf below.

Though they will sometimes talk of these matters with great earnestness and apparent conviction, yet, we believe, of all people, that have been known on the earth, their thoughts, hopes and fears dwell the least on any thing beyond this life. It seems to be inexplicable to them, that any part of their conduct here can have any bearing upon their condition hereafter. If they can be comfortable, and gain their points in this life, they concern themselves very little about what will happen to them in the life to come. Of course, adult savages have too often been found hopeless subjects, upon whom to bestow the pure and sublime truths of our gospel. The days of the Brainards and Elliots seem to have gone by; or the western and southern savages are more hopeless subjects for conversion, than those of the north. They have certainly been found utterly destitute of the plastic docility of the Mexican and Peruvian

Indians. Charleyoix has given, as a characteristic trait of the Canadian and western savages of his day, one, that has been found equally applicable to them at the present time. They listen with apparent docility and attention to our expositions of our religion, our faith, and our hopes; and assent to all, and admit, that this may all be true, in relation to individuals of our race. They relate in turn their own fables, their own dim and visionary notions of a God and hereafter; and exact the same docility and complaisance to their creed, which they yielded to ours.

In respect to the lesser morals, all savages in this region are hospitable. Even the enemy, whom they would have sought, and slain far from their cabins, who presents himself fearlessly there, claims, and receives their hospitality. They accord to the cabin hearth, the honors and the sanctity of an asylum. A great number of instances are on record, of savages of hostile tribes, obnoxious to the most deadly revenge of particular warriors, presenting themselves on a sudden before those warriors, and offering their bosoms to the knife. This heroism often not only disarms revenge, but with admiration excites more generous feelings, and brings about a peace between the contending tribes. That part of our character, which they are the last to understand, is that when we have received in their villages the most ample hospitality, they, in returning the visit, should find, that our strangers lodged in taverns.

We have not the same plenary faith in their tenacious remembrance of kindnesses, and the certainty of our dependence upon the constancy of their friendship. We consider them a treacherous people, easily swayed from their purpose, paying their court to the divinity of good fortune, and always ready to side with the strongest. We should not rely upon their feelings of to-day, as any pledge for what they will be to-morrow.

They are well known for their voraciousness of appetite. They endure hunger and thirst, as they do pain and death, with astonishing patience and constancy. When they kill a deer, a buffalo, or a bear, after a long abstinence, they will devour an enormous quantity of flesh.— Their fatal and devoted attachment to ardent spirits, is matter of melancholy notoriety. In all their councils, and 'talks' and conferences with the officers of the government, from Lake Erie to the Rocky Mountains, the first and the last request is 'whiskey.' This is the only point upon which it is useless to appeal to the feelings of honor and shame in an Indian. Declaim as we may against the use of it; paint the ill effects of it, as strongly as we choose; speak with as much contempt as we may, of drunkards; their best and their bravest still clamor for whiskey. Schoolcraft gives us a characteristic anecdote to this effect. A noted Pottawotomie chief presented himself to the American agent at Chicago,

as a good man, and a good friend to the Americans, and concluded with the usual request for whiskey. The reply was, that the agent did not give whiskey to good Indians; that such neither asked for it, nor drank it, when offered; that it was bad Indians only, who asked for whiskey. The Indian replied with great quickness, in broken English, 'Me d—n rascal.'

All words would be thrown away in attempting to portray, in just colors, the effects of whiskey upon such a race. It is, indeed, the heaviest curse that their intercourse with the whites has entailed upon them. Every obligation of duty, as philanthropists and Christians, imposes upon us all possible efforts to prevent the extirpation of the whole race; the inevitable consequence of their having free access to this liquid poison. We have adverted to the stern and rigorous prohibitions of the General Government, and the fidelity with which they are generally carried into effect; yet, in some way or other, wherever Americans have access, Indians have whiskey. It is understood that the laws of the State Governments and of the General Government are not in concert upon this subject. It is matter of undoubted fact, that in the States the Indians find much less difficulty in procuring whiskey, than in the Territories; and, of course, intoxication is far more common. The duties of the States imperiously call upon them to frame laws in unison with those of the General Government, and to unite with that, to prevent these unhappy beings from exercising their suicide propensities.

It has been inferred, because they make it a point, not to express astonishment or curiosity, in view of our improvements and arts, that they have little curiosity; and because they seem to hold them in contempt and disdain, that they have nothing analogous to the cupidity, vanity or pride of the whites. They are, unquestionably, a very proud race; and their pride induces them to affect indifference, and to hold those things in apparent contempt which they are conscious they cannot obtain. As regards their vanity, we have not often had the fortune to contemplate a young squaw at her toilet. But from the studied arrangement of her calico jacket, from the glaring circles of vermilion on her round face, from the artificial manner in which her hair is clubbed, and from the time which she occupies in completing these arrangements, we infer, that dress, and personal ornament, occupy the same portion of her thoughts, that they do of the fashionable women of civilized society. A young Indian warrior is notoriously the most thorough-going beau in the world. Broadway and Bond street furnish no subjects that will spend as much time, or endure as much crimping and confinement, to appear in full dress. We think that we have observed such a character, constantly employed with his paints and his pocket glass for three full hours.

laying on his paints, and arranging his tresses, and contemplating, with visible satisfaction, from time to time, the progress of his attractions.—The chiefs and warriors, in full dress, have one, two, or three clasps of silver about their arms, generally jewels in their ears, and often in their nose; and nothing is more common, than to see a thin, circular piece of silver, of the size of a dollar, hanging from their nose, a little below their upper lip. This ornament, so horribly inconvenient, seems to be one of the highest Indian taste. Painted porcupine quills are twirled in their hair. Tails of animals hang from the hair behind; or from the point where they were originally appended to the animal. A necklace of bear's or alligator's teeth, or claws of the bald eagle, or common red beads, or, wanting these, a kind of rosary of red hawthorns, hangs about the neck. From the knees to the feet, the legs are ornamented with great numbers of little perforated, cylindrical pieces of silver, or brass, that tinkle as the person walks. If to all this, he add an American hat, and a soldier's coat, of blue, faced with red, over the customary calico shirt, he steps firmly on the ground, to give to his tinklers a simultaneous noise, and apparently considers his person with as much complacency as the human bosom can be supposed to feel. This is a very curtailed view of an Indian beau, and faithful, as far as it goes, to the description of almost every young Indian at a great public dance.

So many faithful prints have recently been presented to the public of the Indian figure and costume, that most of those, who have not seen the living subject, have definite views of it. The males for the most part, wear leggings, sitting closely from the loins to the ankles, generally of smoke-tanned deer skin, sometimes of blue cloth. Those who inhabit beyond the range of the buffalo, wear a blanket, thrown loosely over the shoulders; and those who live in the region of the buffalo, wear a dressed skin of that animal. Their moccasins are ornamented with extreme care with different colored porcupine quills, arranged in lines and compartments. But in the sultry months, they are often seen with no other dress, than a piece of blue cloth, in the language of the country, 'strouding,' passed between the thighs, and brought round the loins. In regions contiguous to the whites, they have generally a calico shirt of the finest colors; and they are particularly attached to a long calico dress, resembling a morning gown.

The women have a calico jacket, leggings, not much unlike those of the men, and wherever they can afford it, a blue broadcloth petticoat. We do not remember to have seen Indians either male or female, effect any other colors, than red or blue. The thick, heavy, black tresses of hair are parted on the forehead, and skewered with a quill or thorn in a large club behind.

They have various dances, to which they are extravagantly attached; and which often have, as did the dances of the old time, a religious character. The aged council chiefs drum, and the young warriors dance with great vehemence, beating the ground with their feet. They pursue the business with a vigor, which causes the perspiration to pour from their bodies. They have the war, the council, the feast, and the dog dance; and tunes corresponding to the different objects. The tunes are very monotonous, running through only three or four notes, and constantly recurring to the same strain. In most of the tribes, the women take no part in the song or dance.—Among some of the tribes, we have heard the women chime in on the last note.

Incredible stories are related of the powers of their jugglers and mountebanks. Many of their alleged feats never took place, except in the imaginations of the ignorant people, who related them. But they have undoubtedly a rigidity of muscle, a callousness of nerve, and a contempt of pain and wounds, that enable them to achieve swallowing fire, putting knives and swords down their throats, and such like exploits with great success. To create admiration is of course a passion with them; and this desire incites them to thought and study, in order to learn the mystic art of legerdemain, in which they certainly attain no inconsiderable proficiency. Their medicine men are a kind of jugglers; and there is much ceremony and affectation of mystery, in the preparing and administering their medicines. The most amusing part of this business is, that the scaramouch who has gone through all the ceremonies, and prepared the medicine, generally takes it himself. We have little faith in their boasted acquaintance with remedies, from their own vegetable kingdom. We have remarked, that when they were near our settlements, their sick are in the habit of applying to our physicians.

The Indian head is such, as we would suppose the craniologists would select, as finely moulded for intelligence. In this respect he would probably place them, as a race, beside the *homo sapiens Europæus*.—We have seen them in every position, to try their native acuteness. We have taught their young. We consider them naturally a shrewd, intelligent people, with heads capable of the highest mental development in every department of thought, in as great a degree as our own race. They have, probably, as much curiosity, but a more stern perseverance in the effort to suppress it. The first time that they witness a steam boat, they never suppress the outward expression of their admiration, and their emphatic ‘ugh!’

Languages. It cannot be expected, that we should dismiss this article, which with every effort to curtail it, has grown up under our hands, without remarking on their languages. In all their dialects we suspect,

that, like the Chinese, their words were originally but of one syllable. —Every word, then, of more than one syllable, has been formed in the progress of advancing ideas among them, by a corresponding combination of ideas. Having few abstractions among their ideas, and knowing and caring little about our complex combinations of thought, conversant wholly with tangible and visible matters, their expressions are paintings of sensible ideas with the coloring matter of words. Whenever we undertake to convey to them a connected chain of abstract ideas, they turn to us for a while with a complacent inclination of the head, and apply their hand to their ear, with the sign, so readily understood by all Indians, to imply that they are deaf. Their manner of numbering, evidences the extreme simplicity of their language. We have requested of all the tribes, with which we have been conversant, their terms of numbering, as far as an hundred. In some, the terms are simple as far as ten. In others, six is five-one, seven five-two, and so on. Beyond ten they generally count by reduplication of ten. This they perform by a mechanical arithmetic, intricate to explain, but readily apprehended by the eye. Some of the tribes are said to be perplexed in their attempts to number beyond an hundred. When the question turned upon any point, that involved great numbers, we have generally heard them avail themselves of an English word, the first, we believe, and the most universally understood by savages—heap. We have read, that in some of their languages, there are subtleties of structure, and nice shades of divisions of time, in the tenses of their verbs, that transcend even the famed exactness and finish of the Greek. There is something inexplicable, it must be admitted, in the combinations and artificial structure of the language of a people of such extreme simplicity of thought.

We profess to know little of the origin of these languages. We suspect, that a life might be spent in studying them in the closet to very little purpose. The savages vary their meaning by the accent and intonation which they give their words, still more than the French. We fear, that a printed page of Indian words, most carefully and accurately noted by the marks of accent and sound in our dictionaries, could hardly be read by an unpractised American, so as to be intelligible to the Indian, whose language they purport to be. We suppose the Muskogee and Cherokee to be the patriarchal dialects of the South; the Chippeway and Dakota, of the Indians of the lakes and the Upper Mississippi; and the Osage and Pawnee, of the savages of Missouri, Arkansas, and Red River.—We should not forget, that they have a language of signs,—the Latin, or common language, by which all the tribes converse with each other. It is a trite maxim, that 'Necessity is the mother of invention;' and it is inconceivable, except by those who have witnessed it, how copious and

expressive a language they have formed with signs. In Long's first expedition a full and accurate vocabulary of this language is given.

After all, that which has struck us, in contemplating the Indians, with the most astonishment and admiration, is the invisible but universal energy of the operation and influence of an inexplicable law, which has, where it operates, a more certain and controlling power, than all the municipal and written laws of the whites united. There is despotic rule, without any hereditary or elected chief. There are chiefs with great power, who cannot tell when, where, or how, they became such. There is perfect unanimity in a question involving the existence of a tribe, where every member belonged to the wild and fierce democracy of nature, and could dissent, without giving a reason. A case occurs, where it is prescribed by custom, that an individual should be punished with death. Escaped far from the control of his tribe, and as free as the winds, this invisible tie is about him; and he returns and surrenders himself to justice.—His accounts are not settled, and he is in debt; he requests delay, till he shall have accomplished his summer's hunt. He finishes it, pays his debt, and dies with a constancy, which has always been, in all views of Indian character, the theme of admiration.

A serious question occurs, in conclusion. What is the prospect of bringing to these rugged and comfortless beings, apparently the outcasts of nature and civilization, the moulding, the guidance and hopes of the Gospel?—The gloomy fact must be admitted, that but little has yet been done. Pious and devoted Catholic missionaries have carried their lives in their hands, have renounced all earthly hopes, and have lived and died among them, to carry them the Gospel. The Protestants have not been behind them in these labors of love. But, after the lapse of more than a century, scarcely an adult savage can be found, west of the Mississippi, who will pronounce himself a Christian. There are many that have crosses suspended from their necks, which they show as they do their medals.—They seem to think, that the profession of Christianity gives them additional claims upon us. While we were writing, some Appalachy Indians applied to the judge of the district, where we resided, for redress. They spoke of the alleged outrage in terms of indignant feeling. '*Nous sommes baptises*,' we have been baptised, said they; and appeared to feel as if this gave the outrage a greater enormity. We are sure, that if any effort can have marks of moral heroism, and nobleness of self-devotion beyond another, the self-devotion of missionaries among the savages, is the noblest of all. Surely, if any men merit earnest wishes and prayers for their success, it must be those men who have left the precincts of everything that is desirable in life, to go into these solitudes, and take in hand these uninformed children of nature.

There are some circumstances, which invest the present missionary efforts with stronger probabilities of success, than any, that have preceded them. The number of Indians, that are half breeds, or mixtures of the blood of the whites, is great, and continually increasing. These generally espouse, either from conviction, or from party feeling, the interest of civilization and Christianity. It is more universally, than it once was, a conviction, that Christianity is the religion of social and civilized man. Instead of relying much on the hope of the conversion of adult hunting and warrior savages, the effort is chiefly directed towards the young. Schools, the loom, the anvil, the plough, are sent to them. Amidst the comfort, stability and plenty of cultivation, they are to be imbued with a taste for our institutions, arts, industry and religion, at the same time.—Every benevolent man will wish these efforts of benevolence all possible success.

MONUMENTS. The tumuli, or mounds of the western country, are first seen on the southern shores of lake Erie. We trace them through the western parts of New York. We find them increasing in numbers and size in the state of Ohio. They are seen thence, with more or less frequency, over all the valley; and from Humboldt we learn, that mounds of a similar character abound in Mexico. If so much had not been already written upon the subject, we should hold it idle to detain the reader a moment, in useless dissertation upon the question, by whom these mounds were formed, and for what purposes? As every opinion on the point must rest entirely upon conjecture, without the slightest rational element on which to found it, we shall discover at once, that such dissertations could throw no certain light on the subject. Whether the mass of them was constructed for fortifications, observatories, temples, or tombs, it is hopeless to enquire. That some of them served for the last purpose, we have the conclusive evidence, that they abound in human bones. It has been often asserted, that some of the mounds are full of bones, that are perforated, as though the living subjects were slain in battle; and that the skeletons are heaped together in promiscuous confusion, as if buried after a conflict, without order or arrangement. The bones, which we have seen, were such, and so arranged, as might be expected in the common process of solemn and deliberate inhumation. The mounds show no more art, though infinitely more labor, than might be expected from the present Indians. They are mere erections of earth, exhibiting no other trace of skill, than that most of them are of regular forms, contained under circular or right lines. Iron tools were not used in the formation of them. Stone makes no part of them. Yet many of the squares and parallelograms make a much more conspicuous figure,

after the lapse of unknown ages, than the defences of earth, thrown up on the Atlantic shore, during the revolutionary war.

Some of them are said to be found on hills. We have seen none such. They are generally on fertile wooded bottoms, plains, or the richer alluvial prairies, where wild fruits, game and fish are abundant and at hand. The most dense ancient population existed precisely in the places where the most crowded future population will exist in the generations to come. The appearance of a series of mounds generally indicates the contiguity of rich and level lands, easy communications, fish, game, and the most favorable adjacent positions. The only circumstance, which strongly discredits their having been formed by the progenitors of the present Indians, is the immensity of the size of some of them, beyond what could be expected from the sparse population and the indolence of the present race. We know of no monuments, which they now raise for their dead, that might not be the work of a few people in a few days. We have seen mounds, which would require the labor of a thousand of the men employed on our canals, with all their mechanical aids, and the improved implements of their labor for months. We have, more than once, hesitated in view of one of these prodigious mounds, whether it were not really a natural hill. But they are uniformly so placed, in reference to the adjoining country, and their conformation is so unique and similar, that no eye hesitates long in referring them to the class of artificial erections. The largest, that has been discovered in the Ohio valley, as far as we know, is in the bottom of Grave Creek, near its entrance into the Ohio, and fourteen miles below Wheeling. It is between thirty and forty rods in circumference at its base, with a proportionate diameter. It is seventy feet in perpendicular height; and has a table area on its summit, which is sixty feet in diameter, in the centre of which is a great and regular concavity. A single white oak rises from this concavity, like a flag staff.

The most numerous group of mounds, that we have seen, is near Cahokia, in the American bottom. There are said to be two hundred in all. The largest is on the banks of Cahokia Creek. Its form is that of a parallelogram. Its circumference is commonly given at eight hundred yards, and its height at ninety feet. There is a terrace on the south side of it. The monks of La Trappe had a monastery adjoining it, and their garden was on the terrace. They cultivated the mound. The earth could not have furnished them a place, more in keeping with their profession and avowed objects. In the midst of the American bottom, perhaps the most fertile spot on the globe, exerting its exhaustless fertility only in the production of dense forest, or a useless luxuriance of weeds and flowers, all in view of their dwelling is a solitary prairie.

A few dreaming men, vowed to perpetual silence, apparently belonging more to another world, than this, seat themselves on one of these lonely and inexplicable monuments of generations, that are now no more, in the midst of gigantic weeds, gaudy flowers, and rank grass.—No noise disturbs them, by day or night, but the chirping of the grasshopper, or the cry of wolves, or the hooting of owls.

There are very interesting mounds near St. Louis, a little north of the town. Some of them have the aspect of enormous stacks. That one of them, called the 'falling garden,' is generally pointed out, as a great curiosity.—One of these mounds, and it was a very striking one, was levelled in the centre of Chillicothe. In digging it down, it is said, there were removed cart loads of human bones. The town of Circleville, in Ohio, is principally laid out within the limits of a couple of contiguous mounds; the one circular, the other square. The town has its name from its position, chiefly in the circular mound. In this, and in many other mounds, the singular circumstance is said to exist, and by people, who live near them, and ought to know that, of which they affirm, that the earth, of which they are composed, is entirely distinct from that in the vicinity. It is of no avail to enquire, why the builders should have encountered the immense toil, to bring these hills of earth from another place?

Our country has been described abroad, as sterile of moral interest. We have, it is said, no monuments, no ruins, none of the colossal remains of temples, and baronial castles, and monkish towers; nothing to connect the imagination and the heart with the past; none of the dim recollections of times gone by, to associate the past with the future. We have not travelled in other lands. But in passing over our vast prairies, in viewing our noble and ancient forests, planted by nature, and nurtured only by ages; when we have seen the sun rising over a boundless plain, where the blue of the heavens in all directions touched, and mingled with the verdure of the flowers; when our thoughts have traversed rivers of a thousand leagues in length; when we have seen the ascending steam boat breasting the surge, and gleaming through the verdure of the trees; when we have imagined the happy multitudes, that from these shores will contemplate this scenery in days to come; we have thought, that our great country might at least compare with any other, in the beauty of its natural scenery. When, on an uninhabited prairie, we have fallen at nightfall upon a group of these mounds, and have thought of the masses of human bones, that moulder beneath; when the heart and the imagination evoke the busy multitudes, that here 'strutted through life's poor play,' and ask the phantoms who and what they were, and why they have left no memorials, but these mounds; we have found ample scope for

reflections and associations of the past with the future. We should not highly estimate the mind, or the heart of the man, who could behold these tombs of the prairies without deep thought.

These regions bear ample testimonials, of another sort, of a world gone by. Besides the human skeletons, found in the nitre caves, and at the Maramec, of which we shall have occasion to speak in another place, there are found at the licks, and, as habitation and cultivation bring us more acquainted with what is concealed beneath the soil, over all the valley, masses of bones of animals of enormous size, to which the name of mammoth and megalonyx have been given. A ship's cargo could easily be furnished.—The bones of animals of different classes, forms and sizes from any that are now known to exist, and different, too, from the mammoth, are discovered in the same places with these huge remains. While we are writing, they are exhibiting at New-Orleans the bones of an animal, to which the mammoth itself must have been a pigmy, found near Plaquemine, on the Mississippi, below that city.—They have been asserted, and denied to be the bones of a whale. A diligent and unwearyed antiquarian, in the state of Ohio, affirms, that he has discovered, in laying open the earth in his geological examinations, the wood and the leaves of the bread-fruit tree, and other vegetable tropical remains. Whatever credit this opinion may receive, all admit, that every part of the Mississippi valley is marked with monuments of immense and inexplicable changes in the natural world, and of races of animals and men, that are now no more.

PRESENT POPULATION. The progress of the population of this country, as every one knows, is without any example or parallel in the records of other colonies, in ancient or modern times; not excepting even the annals of the advancement of the Atlantic country. We can remember, when all this country, except the ancient French colonies in it, was an unknown and an unpeopled wilderness. The first settlers encountered incredible hardships and dangers. But only open before Americans a fertile soil, and a mild climate, and their native enterprise, fostered by the stimulant effect of freedom and mild laws, will overcome every impediment. Sickness, solitude, mountains, the war-whoop, the merciless tomahawk, wolves, panthers, and bears, dear and distant homes, forsaken forever, will come over their waking thoughts, and revisit their dreams in vain, to prevent the young, florid and unportioned pair from scaling remote mountains, descending long rivers, and finally selecting their spot in the forests, consecrating their solitary cabin with the dear and sacred name of home.

The following synoptical view, will show in a few words, the astonishing advance of this population. In 1790, the population of this valley, exclusive of the country west of the Mississippi, and of Florida, which were not then within our territorial limits, was estimated, by enumeration, at little more than 100,000. In 1800, it was something short of 380,000. In 1810, it was short of a million. In 1820, including the population west of the Mississippi, rating the population of Florida at 20,000, and that of the parts of Pennsylvania and Virginia included in this valley at 300,000, and it will give the population of 1820 at 2,500,000. The present population may be rated at 4,000,000. It will be perceived, that this is an increase, in more than a duplicate ratio in ten years.

Some considerable allowance must be made, of course, for the flood of immigration, which cannot reasonably be expected to set this way, for the future, as strongly as it has for the past. Ohio, with the largest and most dense population of any of the western states, has nearly double the number of inhabitants, by the census of 1830, which she had by that of 1820.—During that interval, her gain by immigration has scarcely equalled her loss by emigration; and of course, is simply that of natural increase. In the rapidity of this increase, we believe, this state not only exceeds any other in the west, but in the world. It is the good natured jest of all, who travel through the western states, that however productive in other harvests, they are still more so in an unequalled crop of flaxen headed children; and that 'this is the noble growth our realms supply.' We have a million more inhabitants, than the thirteen good old United States, when, at the commencement of the revolutionary war, they threw down the gauntlet in the face of the parent country, then the most powerful empire on the globe.

Notwithstanding the impression, so generally entertained in the Atlantic country, that this valley is universally unhealthy, and notwithstanding the necessary admission, that fever and ague is prevalent to a great and an annoying degree, the stubborn facts, above stated, demonstrate, beyond all possibility of denial, that no country is more propitious to increase by natural population. Wherever the means of easy, free and ample subsistence are provided, it is in the nature and order of human things, that population should increase rapidly. In such a country, though some parts of it should prove sickly, perseverance will ultimately triumph over even this impediment, the most formidable of all. In that fertile region, for the insalubrious districts are almost invariably those of the highest fertility, immigrants will arrive, become sickly, and discouraged; and perhaps, return with an evil report of the country. In the productive and sickly sections of the south, allured by its rich products,

and its exemption from winter, adventurers will successively arrive, fix themselves, become sickly, and it may be, die. Others, lusting for gain, and with that recklessness to the future, for wise ends awarded us by Providence, and undismayed by the fate of those, who have preceded them, will replace them. By culture, draining, the feeding of cattle, and the opening the country to the fever-banishing breeze, the atmosphere is found gradually to meliorate. The inhabitants, taught by experience and suffering, come by degrees to learn the climate, the diseases, and preventives; and a race will finally stand, which will possess the adaptation to the country, which results from acclimation: and even these sections are found, in time, to have a degree of natural increase of population with the rest. Such has proved to be the steady advance of things in the sickliest points of the south. The rapidity of our increase in numbers multiplies the difficulties of subsistence, and stimulates and sharpens the swarming faculties and propensities in the parent hive, and will cause, that in due lapse of time and progress of things, every fertile quarter section in this valley will sustain its family.

Another pleasant circumstance appended to this view is, that almost the entire population of the valley are cultivators of the soil. The inhabitants of crowded towns and villages, the numerous artizans and laborers in manufactories, can neither be, as a mass, so healthy, so virtuous or happy, as free cultivators of the soil. The man, whose daily range of prospect is dusty streets, or smoky and dead brick walls, and whose views become limited by habit to the enclosure of these walls; who depends for his subsistence on the daily supplies of the market; and whose motives to action are elicited by constant and hourly struggle and competition with his fellows; will have the advantage in some points over the secluded tenant of a cabin, or a farm house. But still, taking every thing into the calculation, we would choose to be the owner of half a section of land, and daily contemplate nature, as we tilled the soil, aided in that primitive and noble employment by our own vigorous children. The dweller in towns and villages may have more of the air and tone of society, and his daughters may keep nearer to the changes of the fashions. But we have little doubt, that, in striking the balance of enjoyment, the latter will be found to be the happier man, and more likely to have a numerous and healthy family. The people of the west, with very small deductions, are cultivators of the soil. All, that are neither idle, nor unable to labor, have a rural abundance of the articles which the soil can furnish, far beyond the needs of the country; and it is one of our most prevalent complaints, that this abundance is far beyond the chances of profitable sale.

Ohio, has, palpably, more of the northern propensity to form villages, and condense population, than any other of the western states. Of course, her people have a readier aptitude for an artisan's life, and a manufacturer's condition. We suppose, that at least half the manufacturers of the west inhabit the region, of which, Pittsburgh and the state of Ohio are the centre. Her sons, too, have the New England aspiration to become scholars and professional men, and merchants and traders. Kentucky and Ohio send abroad their circulating phalanxes of this kind of foragers, to compete with the Yankees for the professions and trade of the more western states. In Ohio, this class bears by far the greatest proportion to the cultivators, of any part of the valley. Yet in Ohio, from the returns of the very accurate census of 1820, it appears, that out of a population of nearly 800,000, there were only 18,956 manufacturers, and 1,459 merchants and traders. Thus it appears, that nearly twenty-nine out of thirty of this whole population, were engaged in agriculture.

It would require a separate and distinct article, if we were to trace the influence of slavery upon population and improvement. This discussion too, would more properly fall under the head of an article, presenting a contrasted view of the condition and progress of the slave holding, comparing with the non-slave holding states. It is sufficient for our present purposes to remark, that with the exception of some districts that are particularly sickly, the blacks increase still more rapidly than the whites.

From the general fertility of the soil, and the abundance with which it yields all the supplies of life; from the comparative rareness and small proportion of sterile, mountainous and marshy lands, that cannot be easily brought into cultivation; no thinking mind can have failed to foresee, that this country must and will ultimately sustain a great and dense population of farmers. Taking into view soil, climate, and the means of easy communication, the most material and natural elements upon which to calculate, in regard to future increase of population, and no country can be found, which invites increase more strongly than ours. In half a century, the settled parts of it will, probably, have become as healthy as any other country. In that lapse of time, it can hardly be sanguine to calculate, that by improving the navigation of the existing rivers, by the numerous canals which will be made, in aid of what nature has already done, in a region where there are no mountains, and few high hills, and no intermixture of refractory granite; where the rivers, which rise almost in the same level, interlock, and then wind away in opposite directions; where, from these circumstances, and the absence of granite hills, canals can be made with comparative ease; that the country will be permeated in every direction, either by steam boats, or sea vessels towed by

them, or by transport conducted by rail-road power. No country, it is generally supposed here, can be found, which contains so great a proportion of cultivable and habitable land, compared with the whole extent of its surface.—Humbolt, so well qualified to judge by comparison, has pronounced it the largest valley in the world. It has a less proportion of swamps, sterile plains, and uncultivable mountains, than any other region of the same extent.—When it shall have been inhabited as long as Massachusetts and Virginia, what limits can imagination assign to its population and improvement?

No one can fail to have foreseen, at this time of the day, that the period is not far distant, when the greater mass of the population of our country will be on this side the mountains. We would not desire, in anticipation, to vex the question, where the centre of our National Government will then be? We are connected already with the Atlantic country by noble roads. We shall shortly be connected with the Hudson, Delaware and Chesapeake Bays, by navigable canals. A rail-road between Baltimore and the Ohio, is in rapid progress, and thousands have travelled on the first completed section. Our different physical conformation of country, and the moral circumstances of our condition, have assigned to us, as we think, agriculture, as our chief pursuit. Suppose manufactures to flourish among us to the utmost extent, which our most honest and earnest patriots could desire, and we should still, as we think, find ourselves bound by the ties of a thousand wants, to the country north and east of the mountains. The very difference of our physical and moral character contributes to form a chain of mutual wants, holding us to that region by the indissoluble tie of mutual interest. At present, the passage of the mountains, formerly estimated by the Atlantic people something like an East Indian voyage, and not without its dangers, as well as its difficulties, is no more, than a trip of pleasure of two or three days. We shall soon be able to sail, at the writing desk, or asleep, from New Orleans, Fort Mandan, or Prairie du Chien, through the interior forests to the beautiful bay of New York. The time is not distant, when the travelled citizen of the other side the mountains will not be willing to admit that he has not taken an autumnal or vernal trip of pleasure, or observation, from Pittsburgh to New Orleans. The landscape painter and the poet will come among us, to study and admire our forest, river and prairie scenery, and to imbibe new ideas, from contemplating the grandeur and the freshness of our nature.

For us, as a people, we look over the mountains, and connect our affections with the parent country beyond, by the strong ties of natal attachment; for there, to the passing generation at least, was the place of their birth. There still live our fathers and our brethren. There are

the graves of our ancestors; and there are all the delightful and never forgotten remembrances of our infancy and our boyhood. We have hitherto been connected to that country, by looking to it exclusively for fashions, models and literature. The connexion will remain, not as we hope, a slavish one; for duty, interest and self-respect imperiously call upon us to set up for ourselves, in these respects, as fast as possible. But as younger members of the family, thrust into the woods, to give place to those who had the rights of primogeniture, and obliged to find our subsistence by cutting down the trees, we have as yet had but little leisure to think of anything, beyond the calls of necessity, and the calculations of immediate interest and utility. As soon as we have the leisure for higher purposes, we shall be unworthy of our family alliance, if we do not immediately institute a friendly rivalry in these respects, which will be equally honorable and useful for each of the parties. We know our rights, and we are able to maintain them. It is only the little minded and puny, that allow themselves to indulge in a causeless and fretful jealousy. There must be a real, palpable and continued purpose to undervalue us, and curtail our rights, and arrest our advancement and prosperity, before we would allow ourselves to remember our great chain of mountains, and our world by itself. Our patriotism has been tampered with, more than once, even in our infancy. We came forth with honor from every trial. Every link of the golden, and, we hope, perpetual chain of the union, will be grasped as firmly by the citizens of the west, as of the Atlantic. We flatter ourselves, that we have had uncommon chances to note the scale of the western thermometer, in this respect. We have everywhere seen and felt a spirit, which has given us the assurance of conviction, that the popularity of that demagogue would be blasted, and would wither for ever, who should for a moment manifest the remotest incipient wish to touch the chain of this union with an unhallowed hand. The interests and affections of the western people hold to that, as strongly, and proudly, to say no more, as those of the east. From time to time, demagogues will spring up, and atrocious and unprincipled editors will be found to meditate anything, and to dare to insinuate, and write, and publish what they meditate. But the strength and virtue of the community will never bear them out.

Wherever attempts may be made to disaffect, alienate and sever one section of this great union from the rest, may God avert the omen! that attempt will not commence with us. They may reproach us with being rough, untrained, and backwoods men. But as a people we are strong for the union and the whole union. Every true son of the west will join in the holiest aspirations, *'esto perpetua.'* May it last as long as the sun and moon shall endure!

NATIONAL CHARACTER OF THE WESTERN PEOPLE. We shall remark upon the character of the French part of our population, in describing Louisiana and Missouri, where the greater portion of that people is found. We shall remark upon the distinctive character of Kentucky, in giving the Geography of that State. We only wish to catch here, if possible, the slight, but perceptible, peculiarities of national character, which our peculiar circumstances and condition have imposed upon us.

The people of this valley are as thorough a combination and mixture of the people of all nations, characters, languages, conditions and opinions as can well be imagined. Scarcely a State in the Union, or a nation in Europe, but has furnished us immigrants. Philosophers and noblemen have visited us from beyond the seas; some to study our natural history, or to contemplate a new people rising from the freshness of nature, over the fertile ruins of a once submerged world; or deluded here by the pastoral dreams of Rousseau, or Chateaubriand; or in the sample of the savages, to study man in a state of nature.

The much greater proportion of the immigrants from Europe are of the poorer classes, who come here from hunger, poverty, oppression, and the grinding vassalage of crowded and miserable tenants of an aristocratic race, born to the inheritance of the soil, and all the comforts and hopes of present existence. * They find themselves here, with the joy of shipwrecked mariners, cast on the untenanted woods, and instantly become cheered with the invigorating hope of being able to build up a family and a fortune from new elements. *'The north has given to us, and the south has not kept back.'* The puritan and the planter, the German and the Irishman, the Briton and the Frenchman, each with their peculiar prejudices and local attachments, and the complicated and inwoven tissue of sentiments, feelings and thoughts, that country, and kindred, and home, indelibly combine with the web of our youthful existence, have here set down beside each other. The merchant, mechanic and farmer, each with their peculiar prejudices and jealousies, have found themselves placed by necessity in the same society. Mr. Owen's grand engine of circumstances begins to play upon them. Men must cleave to their kind, and must be dependent upon each other. Pride and jealousy must give way to the natural yearnings of the human heart for society. They begin to rub off mutual prejudices. One takes a step, and then the other. They meet half way, and embrace; and the society thus newly organized and constituted, is more liberal, enlarged, unprejudiced, and, of course, more affectionate and pleasant, than a society of people of unique birth and character, who bring all their early prejudices, as a common stock, to be transmitted as an inheritance in perpetuity.

The rough, sturdy and simple habits of the backwoods men, living in that plenty, which depends only on God and nature, forming the preponderating cast of character in the western country, have laid the stamina of independent thought and feeling deep in the breasts of this people. A man accustomed only to the fascinating, but hollow intercourse of the polished circles in the Atlantic cities, at first feels a painful revulsion, when mingled with this more simple race. But he soon becomes accustomed to the new order of things; and if he have a heart to admire simplicity, truth and nature, begins to be pleased with it. He respects a people, where a poor, but honest man enters the most aristocratic mansion with a feeling of ease and equality.

It may readily be supposed, that among such an infinite variety of people, so recently thrown together, and scarcely yet amalgamated into one people, and in a country, where the institutions are almost as fresh and simple as the log houses, any very distinctive national character could hardly yet be predicated of the inhabitants. Every attentive observer, however, discriminates the immigrants from the different nations, and even from the different states of our own country. The people of Ohio and Indiana, for example, have a character somewhat distinct from that of the other western states. That of the former, especially, is moulded as a very fair sample of the New England and New Jersey patterns. In the latter, this character is blended, not merged with the manners, opinions, and dialect of Kentucky. Illinois, though a free state, has a clear preponderance of Kentucky nationality. Kentucky, Tennessee, Missouri, the upper part of Alabama, and Arkansas, have distinct manners, in which the nationality of Kentucky is the ground color. The country still more south, peopled with large planters of cotton and sugar cane, with numerous gangs of slaves, have the peculiar manners, that have naturally grown out of their condition. On these states too, especially on Louisians, we begin to discern the distinct impress and influence of French temperament and manners. These shades of difference are very distinctly visible to persons who have been long and intimately acquainted with the people of the different regions where they are marked.

But young as the country is, variously constituted and combined, as are the elements of its population, there is already marked, and it is every year more fully developed, a distinctive character of the western people. A traveller from the Atlantic cities, and used only to their manners, descending from Pittsburgh, or Wheeling, the Ohio and Mississippi, in a steam boat of the larger class, will find on board what may be considered fair samples of all classes in our country, except the farmers. To become conversant with the younger representatives of the yeomanry, he

must acquaint himself with the crews of the descending flat boats.—Sufficiently copious specimens of the merchants and traders, the artisans, the large planters, the speculators, and last, though not least, the ladies, will be seen on board the different steam boats, descending to New Orleans, or on their return voyage. The manners so ascertained will strike such a traveller as we have supposed, with as much novelty, distinctness, and we may add, if he be not bigoted and fastidious, with as much pleasure, saving the language, as though he had visited a country beyond the seas. The dialect is different. The enunciation is different. The peculiar proverbial colloquy is different. The figures and illustrations used in common parlance, are strikingly different. We regret that fidelity to our picture, that frankness and truth compel us to admit, that the frequency of profanity and strange curses is ordinarily an unpleasant element in the conversation. The speaking is more rapid. The manner has more appearance of earnestness and abruptness. The common comparisons and analogies are drawn from different views and relations of things. Of course he is every moment reminded, that he is a stranger among a people, whose modes of existence and ways of thinking are of a widely different character from those in the midst of which he was reared.

Although we have so often been described to this traveller, by the repulsive terms 'backwoods men,' 'gougers,' 'ruffians,' 'demi-savages,' a strange mixture, in the slang phrase, of the 'horse' and the 'alligator,' we confidently hazard the opinion, that when a little accustomed to the manners of the better class of people among us, he will institute a comparison between our people, and his own, not unfavorable to us. There is evidently more ease and frankness, more readiness to meet a wish, to form an acquaintance, sufficient tact, when to advance, and how far, and where to pause in this effort; less holding back, less distrust, less feeling as if the address of a stranger were an insult, or a degradation. There is inculcated and practised on board the steam boats, a courtesy to ladies, which is delightful in its proper extent; but which is here, sometimes, apt to overstep the modesty of nature, in the affectation of a chivalrous deference, which would be considered misplaced, or ridiculous on the Atlantic shores. A series of acquaintances are readily and naturally formed between fellow passengers, in their long descents to New Orleans, very unlike the cold, constrained, and almost repelling and hostile deportment of fellow passengers in the short stage and steam boat passages in the Atlantic country. They are very different from the intimacies of fellow passengers in crossing the Atlantic, and infinitely more pleasant. Putting out of the question ennui, sea sickness, and the constant rolling of the vessel, circumstances so unpropitious to the culti-

vation of pleasant intercourse, custom has prescribed a staff and distance on shipboard, which cause, that cabin passengers often cross the ocean together, without acquiring any thing more than a speaking intimacy at the end of the voyage. Not so on these passages, where the boat glides steadily and swiftly along the verge of the fragrant willows. The green shores are always seen with the same *coup d'œil*, that takes in the magnificent and broad wave of the Mississippi. Refreshments come in from the shore. The passengers every day have their promenade. The claims of prescription on the score of wealth, family, office, and adventitious distinctions of every sort, are in a measure laid aside, or pass for nothing. The estimation, the worth and interest of a person are naturally tried on his simple merits, his powers of conversation, his innate civility, his capacities to amuse, and his good feelings.

The distinctive character of the western people may be traced in its minutest shades to a thousand causes, among which are not only their new modes of existence, the solitary lives which they, who are not inhabitants of towns, lead in remote and detached habitations, the greater part of the time, and the readier aptitude and zest, which they will naturally have; when thus brought together, as we have described above, to enjoy society; but it chiefly results from the unchangeable physical formation of the country. For instance, it has been remarked, that the inhabitants of the western country, when thrown upon the blue water, are sailors almost at once. Their long inland water courses, at once the channels of conveyance and communication, place them in primary nautical schools, train them to familiar acquaintance with all the methods of managing and propelling water crafts, and naturally conduct their thoughts from their interior forests, and their rural and secluded abodes, down to the ocean. The skill and facility, thus acquired, in being familiar with the movements of the canoe, the perogue and skiff, almost from the days of infancy, give them the same dexterity and daring on the ocean, when they are at length washed down to its tempestuous bosom, with those who were reared on the shores of that element. But an inhabitant of the Atlantic shore can have but a faint conception of the sublime emotions, with which a young man reared in the silence and seclusion of the western forests, first beholds the illimitable extent of the 'broad, flat sea.' Every intelligent and gifted son of the West will be a poet for the first few hours of his sailing on the ocean, if sea sickness do not banish the visitings of the muse.

Their forests and prairies concur with their inclinations and abundant leisure, to give them the spirit-stirring and adventurous habits of the chase. Their early training to leave the endearments and the maternal nursing of home, for an absence of three or four months, on voyages of

constant exposure, and often of a length of more than five hundred leagues, will naturally tend to create a character, widely unlike the more shrinking, stationary and regular habits of the people of the older country. Multitudes, perhaps the majority of those in the middle walks of life in the Atlantic country, seldom extend their travels beyond their metropolis, or their chief mart. Every part of the middle and northern states is traversed in all directions by fine roads, on which are continually passing great numbers of stage coaches. In the West, all this is very different. There are roads, indeed, some of which nature, and but a very few, art, has rendered tolerably passable. But the passing on them, even in the most populous districts is limited. The passages are seldom more than from village to village, settlement to settlement, and for the most part subservient to arriving at the real roads, the great turnpikes of the West, her long rivers.

These rivers, which bound or intersect every state in the West, are of a character entirely unlike most of those, which flow east of the mountains. They are narrow, deep, and to a person used only to the rivers of the East, and judging them by comparison and by their width, of an inconceivable length of course. Their depth of water resulting from the narrowness of their channels, and the level and alluvial country, through which for the most part they flow, renders them almost universally susceptible of steam boat, or at least boat navigation. The instance of a young man of enterprize and standing, as a merchant, trader, planter, or even farmer, who has not made at least one trip to New Orleans, is uncommon. From the upper and even middle western states, before the invention of steam boats, it was a voyage of long duration, and we may add, of more peril, than a voyage across the Atlantic. These rivers are still descended as before that invention, in boats of every description. In recently making the descent from Pittsburgh to Natchez, in an uncommonly low stage of the waters, we noted between two and three hundred descending boats, of different descriptions, and of the larger class. The greater portion, however, were flat and keel boats. Almost all the crews, that descend on these boats, return on steam boats. An ascending steam boat carries from one to three hundred passengers; and the average trip from New Orleans to Louisville, or St. Louis, may be twelve days, and to Cincinnati, thirteen. Every principal farmer, along the great water courses, builds a flat boat and sends to New-Orleans the produce of his farm in it. Thus a great proportion of the males of the West, of a relative standing and situation in life to be most likely to impress their opinions and manners upon society, have made this passage to New-Orleans. They have passed through different states and regions, have been more or less conversant with men of different nations, languages and manners.

They have experienced that expansion of mind, which cannot fail to be produced by traversing long distances of country, and viewing different forms of nature and society. Each flat or keel boat, that has descended from Pittsburgh or the Missouri, to New Orleans, could publish a journal of no inconsiderable interest. The descent, if in autumn, has probably occupied fifty days. Until the boatmen had passed the mouth of the Ohio, they must have been in some sense amphibious animals, continually getting into the water, to work their boat off shoals and sandbars. The remainder of the descent was amidst all the dangers of sawyers, sandbars, snags, storms, points of islands, wreck heaps, difficulty and danger of landing, and a great many anomalous trials and dangers. The whole voyage is a scene of anxiety, exposure and labor.

It follows, that the habits of the whole people of the West must as necessarily receive a peculiar bent and impulse, as those of Marblehead, Cape Cod, and Nantucket, in Massachusetts. The influence of these causes is already visibly impressed upon the manners and thoughts of the people. They are the manners of people accustomed, on going on board a steam boat, to see it fitted up with a glaring of splendor and display, perhaps not always in the best taste, but peculiarly calculated to captivate and dazzle the youthful eye. They come to this crowded scene of gaiety and splendor, this little moving city, from the solitudes of forests and prairies, and remote dwellings. They find themselves amidst a mass of people, male and female, dressed as much as their means will allow. There are cards, and wine, and novels, and young and gay people, and all conceivable artificial excitements, to stir up the youthful appetite for hilarity. When we consider what temptations these long, and necessarily intimate associations present to minds, often not much regulated by religious discipline, training or example, to undue gaiety, gallantry, intoxication and gambling, it is as surprising as it is honorable to the character of the West, that these voyages are generally terminated in so much quietness, morality and friendship.

It is true, the gay, the young, dashing, and reckless spirits of the community are thus brought in contact, to act, and re-act upon each other, and society. But there are always some graver spirits on the steam boats, whose presence inspires a certain degree of awe and restraint.—A keen sense of the necessity of strong and unvarying regulations, has created rigid rules, at least upon the better of them, for regulating the temporary intercourse on board; and on the whole, there is an air of much more decorum and quietness, than could be inferred from knowing the circumstances of these temporary associations.

In tracing the result of these effects, we discover, that the idea of distance is very different in the head of a west country man, from the same

idea as entertained by the inhabitant of Lancaster in Pennsylvania, or Worcester in Massachusetts. The conversation of the former indicates, that his train of thinking is modelled by images drawn from great distances on long rivers, from extensive trips on steam boats, long absence from home, familiarity with exposure, and the habit of looking danger and death in the face. Were it not foreign to the objects of this article, a thousand amusing examples could be given. The vocabulary of figures drawn from boats and steam boats, the phrases, metaphors, allusions, that grow out of the peculiar modes of life of this people, are at once amusing, singular and copious. The stump speech of a western aspirant for the favors of the people, has a very appropriate garnish from this vocabulary, and compared with that of an Atlantic demagogue, would finely illustrate his peculiar modes of thinking.

The point most to our purpose in these remarks, is to enquire, what influence this, and other great operating causes have upon the character, manners and morals of the people? It must be admitted, that while these frequent trips up and down the river, and more than all to New Orleans, give to the young people, and those who impart authority, impulse and tone to fashion and opinion, an air of society, ease and confidence; the young are apt, at the same time, to imbibes from the contagion of example, habits of extravagance, dissipation, and a rooted attachment to a wandering life.

RELIGIOUS CHARACTER OF THE WESTERN PEOPLE. An experiment is making in this vast country, which must ultimately contain so many millions of people, on the broadest scale on which it has ever been made, whether religion, as a national distinction of character, can be maintained without any legislative aid, or even recognition by the government. If there be any reference to religion, in any of the constitutions and enactments, in the western country, beyond the simple occasional granting of a distinct incorporation, it manifests itself in a guarded jealousy of the interference of any religions feeling, or influence with the tenor of legislation. In most of the constitutions, ministers of the gospel are expressly interdicted from any office of profit or trust, in the gift of the people. In none of the enactments are there any provisions for the support of any form of worship whatever. But if it be inferred from this, that religion occupies little or no place in the thoughts of the people, that there are no forms of worship, and few ministers of the gospel, no inference can be wider from the fact. It is the settled political maxim of the West, that religion is a concern entirely between the conscience and God, and ought to be left solely to his guardianship and care. The people are generally averse by binding themselves by any previous legal obli-

gation to a pastor for services stipulated to be performed. It is the general impression, that he ought to derive his support from voluntary contributions, after services performed, and uninfluenced by any antecedent contract or understanding. There are many towns and villages, where other modes prevail; but such is the general standing feeling of the West.

Hence, except among the Catholics, there are very few settled pastors, in the sense in which that phrase is understood in New England and the Atlantic cities. Most of the ministers that are in some sense permanent, discharge pastoral duties not only in their individual societies, but in a wide district about them. The range of duties, the emolument, the estimation, and in fact the whole condition of a western pastor, are widely different from an Atlantic minister. In each case there are peculiar immunities, pleasures and inconveniences, growing out of the differences of condition. We do not undertake to balance the advantages in favor of either. It has been an hundred times represented, and in every form of intelligence, in the eastern religious publications, that there were few preachers in the country, and that whole wide districts had no religious instruction, or forms of worship whatever. We believe, from a survey, certainly very general, and, we trust, faithful, that there are as many preachers, in proportion to the people, as there are in the Atlantic country. A circulating phalanx of Methodists, Baptists, and Cumberland Presbyterians, of Atlantic missionaries, and of young élèves of the Catholic theological seminaries, from the redundant mass of unoccupied ministers, both in the Protestant and Catholic countries, pervades this great valley, with its numerous detachments, from Pittsburgh, the mountains, the lakes, and the Missouri, to the Gulf of Mexico. They all pursue the interests of their several denominations in their own way, and generally in profound peace.

It is true, a serious mind cannot fail to observe with regret, the want of the permanent and regular moral influence of settled religious institutions. The regular 'church going bell,' to our ear, such a delightful peal on the sabbath, is not often heard in the western villages with the recurrence of that day; and there is something of tranquil sobriety, of elevated and just notions of morals, the influence of which is so immediately perceived in a country, where regular worship prevails, that in the more unsettled districts of this country, is felt as a painful privation. But if we except Arkansas and Louisiana, there is every where else an abundance of some kind of preaching. The village papers on all sides contain printed notices, and written ones are affixed to the public places, notifying what are called 'meetings.' A traveller in a clerical dress does not fail to be asked, at the public houses, where he stops, if he is a preacher, and if he wishes to notify a meeting.

There are stationary preachers in the towns, particularly in Ohio. But in the rural congregations through the western country beyond Ohio, it is seldom that a minister is stationary for more than two months. A ministry of a year in one place may be considered beyond the common duration. Nine-tenths of the religious instruction of the country is given by people, who itinerate, and who are, with very few exceptions, notwithstanding all that has been said to the contrary, men of great zeal and sanctity. These earnest men, who have little to expect from pecuniary support, and less from the prescribed reverence and influence, which can only appertain to a stated ministry, find, at once, that every thing depends upon the cultivation of popular talents. Zeal for the great cause, mixed, perhaps, imperceptibly, with a spice of earthly ambition, and the latent emulation and pride of our natures, and other motives, which unconsciously influence, more or less, the most sincere and the most disinterested, the desire of distinction among their contemporaries and their brethren, and a reaching struggle for the fascination of popularity, goad them on to study all the means and arts of winning the people. Travelling from month to month through dark forests, with such ample time and range for deep thought, as they amble slowly on horseback along their perigrinations, the men naturally acquire a pensive and romantic turn of thought and expression, as we think, favorable to eloquence. Hence the preaching is of a highly popular cast, and its first aim is to excite the feelings.—Hence, too, excitements, or in religious parlance ‘awakenings,’ are common in all this region. Living remote, and consigned the greater part of the time, to the musing loneliness of their condition in the square clearing of the forest, or the prairie; when they congregate on these exciting occasions, society itself is a novelty, and an excitement. The people are naturally more sensitive and enthusiastic, than in the older countries. A man of rude, boisterous, but native eloquence, rises among these children of the forest and simple nature, with his voice pitched upon the tones, and his utterance thrilling with that awful theme, to which each string of the human heart every where responds; and while the woods echo his vehement declamations, his audience is alternately dissolved in tears, awed to profound feeling, or falling in spasms. This country opens a boundless theatre for strong, earnest and unlettered eloquence; and the preacher seldom has extensive influence, or usefulness, who does not possess some touch of this power.

These excitements have been prevalent, within the two or three past years, in the middle western states; chiefly in Tennessee, and for the most part, under the ministry of the Cumberland Presbyterians. Sometimes it influences a settlement, or a town; and sometimes, as there,

spreads over a state. The people assemble, as to an imposing spectacle. They pour from their woods, to hear the new preacher, whose fame has travelled before him. The preaching has a scenic effect. It is a theme of earnest discussion, reviewing, comparison, and intense interest.

None, but one who has seen, can imagine the interest, excited in a district of country, perhaps fifty miles in extent, by the awaited approach of the time for a camp meeting; and none, but one who has seen, can imagine how profoundly the preachers have understood what produces effect, and how well they have practised upon it. Suppose the scene to be, where the most extensive excitements and the most frequent camp meetings have been, during the two past years, in one of the beautiful and fertile valleys among the mountains of Tennessee. The notice has been circulated two or three months. On the appointed day, coaches, chaises, wagons, carts, people on horseback, and multitudes travelling from a distance on foot, wagons with provisions, mattresses, tents, and arrangements for the stay of a week, are seen hurrying from every point towards the central spot. It is in the midst of a grove of those beautiful and lofty trees, natural to the valleys of Tennessee, in its deepest verdure, and beside a spring branch, for the requisite supply of water.

The ambitious and wealthy are there, because in this region, opinion is all-powerful; and they are there, either to extend their influence, or that their absence may not be noted, to diminish it. Aspirants for office are there, to electioneer, and gain popularity. Vast numbers are there from simple curiosity, and merely to enjoy a spectacle. The young and the beautiful are there, with mixed motives, which it were best not severely to scrutinize. Children are there, their young eyes glistening with the intense interest of eager curiosity. The middle aged fathers and mothers of families are there, with the sober views of people, whose plans in life are fixed, and waiting calmly to hear. Men and women of hoary hairs are there, with such thoughts, it may be hoped, as their years invite.—Such is the congregation consisting of thousands.

A host of preachers of different denominations are there, some in the earnest vigor and aspiring desires of youth, waiting an opportunity for display; others, who have proclaimed the gospel, as pilgrims of the cross, from the remotest north of our vast country to the shores of the Mexican gulf, and ready to utter the words, the feelings and the experience, which they have treasured up in a travelling ministry of fifty years, and whose accents, trembling with age, still more impressively than their words, announce, that they will soon travel, and preach no more on the earth, are there.—Such are the preachers.

The line of tents is pitched; and the religious city grows up in a few hours under the trees, beside the stream. Lamps are hung in lines among

the branches; and the effect of their glare upon the surrounding forest is, as of magic. The scenery of the most brilliant theatre in the world is a painting only for children, compared with it. Meantime the multitudes, with the highest excitement of social feeling added to the general enthusiasm of expectation, pass from tent to tent, and interchange apostolic greetings and embraces, and talk of the coming solemnities. Their coffee and tea are prepared, and their supper is finished. By this time, the moon, for they take thought to appoint the meeting at the proper time of the moon, begins to show its disk above the dark summits of the mountains; and a few stars are seen glimmering through the intervals of the branches. The whole constitutes a temple worthy of the grandeur of God. An old man, in a dress of the quaintest simplicity, ascends a platform, wipes the dust from his spectacles, and in a voice of suppressed emotion, gives out the hymn, of which the whole assembled multitude can recite the words,—and an air, in which every voice can join. We should deem poorly of the heart, that would not thrill, as the song is heard like the ‘sound of many waters,’ echoing among the hills and mountains. Such are the scenes, the associations, and such the influence of external things upon a nature so ‘fearfully and wonderfully’ constituted, as ours, that little effort is necessary on such a theme as religion, urged at such a place, under such circumstances, to fill the heart and the eyes. The hoary orator talks of God, of eternity, a judgment to come, and all that is impressive beyond. He speaks of his ‘experiences,’ his toils and travels, his persecutions and welcomes, and how many he has seen in hope, in peace and triumph, gathered to their fathers; and when he speaks of the short space that remains to him, his only regret is, that he can no more proclaim, in the silence of death, the mercies of his crucified Redeemer.

There is no need of the studied trick of oratory, to produce in such a place the deepest movements of the heart. No wonder, as the speaker pauses to dash the gathering moisture from his own eye, that his audience are dissolved in tears, or uttering the exclamations of penitence. Nor is it cause for admiration, that many, who poised themselves on an estimation of higher intellect, and a nobler insensibility, than the crowd, catch the infectious feeling, and become women and children in their turn; and though they ‘came to mock, remain to pray.’

Notwithstanding all that has been said in derision of these spectacles, so common in this region, it cannot be denied, that the influence, on the whole, is salutary, and the general bearing upon the great interests of the community, good. It will be long before a regular ministry can be generally supported, if ever. In place of that, nothing tends so strongly to supply the want of the influence, resulting from the constant duties of a

stated ministry, as the recurrence of these explosions of feeling, which shake the moral world, and purify its atmosphere, until the accumulating seeds of moral disease require a similar lustration again.

Whatever be the cause, the effect is certain, that through the State of Tennessee, parts of Mississippi, Missouri, Kentucky, Ohio, Indiana, and Illinois, these excitements have produced a palpable change in the habits and manners of the people. The gambling and drinking shops are deserted: and the people that used to congregate there, now go to the religious meetings. The Methodists, too, have done great and incalculable good. They are generally of a character, education and training, that prepare them for the elements upon which they are destined to operate. They speak the dialect, understand the interests, and enter into the feelings of their audience. They exert a prodigious and incalculable bearing upon the rough backwoods men; and do good, where more polished and trained ministers would preach without effect. No mind but His, for whom they labor, can know how many profane they have reclaimed, — drunkards they have reformed, — and wanderers they have brought home to God.

The Baptists, too, and the missionaries from the Atlantic country, seeing such a wide and open field before them, labor with great diligence and earnestness, operating generally upon another class of the community. The Catholics are both numerous and zealous; and perfectly united in spirit and interest, form a compact phalanx, and produce the effect of moral union. From their united exertions it happens, that over all this country, among all the occasions for public gatherings, which, from their rareness excite the greater interest, religious meetings are by far the most numerous.

That part of Pennsylvania and Virginia west of the mountains has a predominance of Presbyterians. The great state of Ohio is made up of such mixed elements, that it would be difficult to say, which of all the sects prevails. As a general characteristic, the people are strongly inclined to attend on some kind of religious worship. — Presbyterians and Baptists strive for the ascendancy in Kentucky. Methodists and Cumberland Presbyterians are numerous. They, probably, have the ascendancy in Tennessee, and they are making great efforts in Alabama and Mississippi. Methodists are the prevailing denomination in Indiana, Illinois, Missouri, Arkansas, Mississippi and Alabama. Catholics have an undisputed ascendancy in Louisiana and Florida. They have many societies in Missouri and Illinois. They are prevalent in a portion of Kentucky, and have a very respectable seminary at Bardstown. Methodists, Presbyterians, and Catholics are the prevailing denominations of the West *

*For table of Religious Sects, see Appendix, Table No. VI.

PURSUITS OF THE PEOPLE. Manufactures, &c. Western Pennsylvania is a manufacturing region, and along with Ohio, is the New England of the West. The people bring down the Alleghany, clear and fine pine plank; delivering them along the whole course of the Ohio, and sending great quantities even to New Orleans. These pines, of which the houses in New Orleans are finished, waved over the streams of New York, and are despatched in rafts and flat boats, after being sawed into plank, from Orleanne point. From the Monongahela is sent the rye whiskey, which is so famous in the lower country. On the Youghiogheny and Monongahela, at Connelsville on the former, and Brownsville on the latter, are important manufactories, chiefly of iron. Pittsburgh has been called the Birmingham of America; though that honor, is keenly disputed by her rival, Cincinnati. There are numerous manufacturing towns in Ohio, of which, after Cincinnati, Zanesville and Steubenville are the chief. All this region, in numerous streams, calculated for water power, in a salubrious climate, in abundance of pit coal, in its position, and the genius and habits of its inhabitants, is naturally adapted to become a manufacturing country. Materials for articles of prime necessity, as salt, iron and glass, exist in the most ample abundance. Pittsburgh, blackened with the smoke of pit coal, and one quarter of Cincinnati, throwing up columns of smoke from the steam factories, may be considered as great manufacturing establishments. If we except the cordage, bale rope, bagging, and other articles of hempen fabric, manufactured in Kentucky, the chief part of the western manufactures originates in west Pennsylvania and Ohio. There are some indications, that Indiana will possess a manufacturing spirit; and there are separate, incipient establishments of this kind, more or less considerable, in every state, but Louisiana and Mississippi.

These manufactures consist of a great variety of articles of prime necessity, use and ornament. The principal are of iron, as castings of all sorts; and almost every article of ironmongery, that is manufactured in the world. This manufacture is carried on to an immense extent.

Glass is manufactured in various places, at present, it is supposed nearly to an amount, to supply the country. Manufactures in woollen and cotton, in pottery, in laboratories, as white and red lead, Prussian blue, and the colors generally, the acids and other chemical preparations, in steam power machinery, saddlery, wheel irons, wire drawing, buttons, knitting needles, silver plating, morocco leather, articles in brass and copper, hats, boots and shoes, breweries, tin, and other metals, cabinet work; in short, manufactures subservient to the arts, and to domestic subsistence, are carried on at various places in the western country with great spirit. Ohio has imbibed from her prototype, New England, manu-

facturing propensities; and we have heard it earnestly contested, that her capabilities for being a great manufacturing country, were even superior to those of New England. It is affirmed, that, taking the whole year into consideration, her climate is more favorable to health; and there can be no question, that in her abundance of fuel, pit coal, and iron and the greater profusion of the raw material of manufactures in general, she has greatly the advantage.

In the state of Kentucky, hemp is raised to a considerable extent; and in its different manufactures, constitutes a material article in her exports. Salt is manufactured through all the western country in sufficient abundance for home consumption. Shoes, hats and clothing, to a considerable extent, are yet imported from abroad into some of the western states. But, as we have remarked, the far greater part of the people are farmers. In west Pennsylvania and Virginia, in Ohio and Kentucky, in Indiana, Illinois, Missouri, and a part of Tennessee, the same articles are grown, and sent abroad, as flour, corn, the small grains and whiskey; pulse, potatoes, and the other vegetables; fruit, as apples, dried peaches, and other preserved fruits; beef, pork, cheese, butter, poultry, venison hams, live cattle, hogs and horses. The greater part of the flour is sent from Ohio and Kentucky; though Indiana, Illinois and Missouri are following the example with great vigor. Wheat is grown with more ease in Illinois and Missouri than in the other states. Ohio has gone considerably into the culture of yellow tobacco.—Tobacco is one of the staples of Kentucky export. Cattle, hogs and horses are sent to New Orleans extensively from Illinois and Missouri, as are, also, lead and peltries. In Arkansas, part of Tennessee, all Alabama and Mississippi, cotton is the chief object of cultivation. Grains, and other materials of nutriment, are only raised in subservience to this culture. The cultivation of Louisiana, and a part of Florida, is divided between cotton and sugar.

The cultivation in all the states, except Ohio, Indiana and Illinois, is chiefly performed by slaves, of whose character, habits and condition, we have yet to treat. The farms in Ohio and Indiana are generally of moderate size, and the cultivators do not materially differ in their habits from those of the northern Atlantic states. In Kentucky, Illinois and Missouri, they are more addicted to what is called 'cropping,' that is, devoting the chief attention to the cultivation of one article. In all the states, save those that cultivate cotton and sugar, they make, on an average, sixty bushels of maize to the acre: and the cultivation consists in ploughing two or three times between the rows, during the growing of the crop. From eighty to an hundred bushels are not an uncommon crop, and manuring is scarcely yet thought of in cultivation. The good lands in Illinois and in Missouri yield from twenty-five to thirty bushels

of wheat to the acre. The cultivation is on prairie, or bottom land; and as the soil is friable, loose and perfectly free from stones, and on the prairies, from every other obstruction, farming is not laborious and difficult, as in hard, rough and rocky grounds. The ease and abundance, with which all the articles of the country are produced, is one of the chief objects of complaint. The necessary result is, that they are raised in such abundance, as to glut the market at New Orleans, and used often not to bring enough to pay the expenses of transportation. All this has been recently so changed by the effects of our canals, the rapid influx of immigration, and the levelling tendency of the increased facilities of transport, that the price of western produce is fast approximating the Atlantic value. A natural result of this order of things will be, that the west will soon export four times its former amount of flour, and other produce.

From the cheapness of corn, and the abundance of 'mast,' as it is called, in the woods, hogs, too, are easily multiplied, far beyond the wants of the people. Pork is becoming one of the great staples of all the western states, except those that grow cotton and sugar. Cincinnati is decidedly the largest pork market in the United States. "Prodigious numbers of swine are slaughtered there, and the business of barrelling it, and curing bacon for exportation, is one of the most important sources of its trade. Cattle and swine, when carried to New Orleans, command a fair price. Horses are an important and increasing article of export. Orchards north of 36° prosper, perhaps, better than in any other country; and apples and cider are already important articles of exportation, and will soon be more so; for nowhere do apple trees grow with more rapidity and beauty, and sooner and more amply load themselves with fruit. Venison and deer skins, honey and beeswax, are commonly received in the country stores, in pay for goods. From Missouri, peltries, furs and lead, from the Illinois mines, and from those in the Missouri mine region, are the chief articles of present export. The amount of export of these articles, together with the cotton and sugar of the southern country, and the prodigious quantities of whiskey from all the western states, will be seen by recurrence to the table of exports.*

Modes of conveyance to market. Water carriage, &c. From the northern and eastern parts of this valley, no inconsiderable amount of the produce and articles of the West, finds its way to the eastern country by the canals and on the lakes. Cleveland and Sandusky, on lake Erie, are deriving importance, from being places of shipment from Ohio over the lakes. The northern garrisons are beginning to be supplied with provi-

* See Appendix, table No. VII.

sions from Illinois and Missouri, by the way of Chicago and lake Michigan. Horses, cattle and swine to a large amount, are driven over the mountains from Ohio and Kentucky. So early as 1813-14, in one year, four thousand and fifty-five transport wagons were numbered from Philadelphia to Pittsburgh. Many of them found a return load of articles of the West. Much of this transport, which has vastly increased since that time, now takes place on the great Pennsylvania canal, which wants the completion of an interval of no great distance among the mountains, to be an entire water communication between Philadelphia and Pittsburgh, and the longest continued canal in the United States. The Ohio and Erie canal is now complete and will add immensely to the facility of transport from the west to the east. Rail roads will concur to the same result; and when the contemplated rail-roads and canals shall be in operation, the western country will be placed more nearly on an equality with the sea-board, in regard to a market.

At present, however, the greater part of the commercial intercourse of the country is yet with New Orleans, by the rivers and the Mississippi, in boats. These are so various in their kinds, and so curious in their construction, that it would be difficult to reduce them to specific classes and divisions. No form of water craft so whimsical, no shape so outlandish, can well be imagined, but what, on descending from Pittsburgh to New Orleans, it may somewhere be seen lying to the shore, or floating on the river. The New York canal is generating monstrous conceptions of this sort; and there will soon be a rivalry between the East and the West, which can create the most ingenious floating river monsters of passage and transport.

The barge is of the size of an Atlantic schooner, with a raised and outlandish looking deck. It had sails, masts and rigging not unlike a sea vessel, and carried from fifty to an hundred tons. It required twenty-five or thirty hands to work it up stream. On the lower courses of the Mississippi, when the wind did not serve, and the waters were high, it was worked up stream by the operation that is called 'warping,'—a most laborious, slow and difficult mode of ascent, and in which six or eight miles a day was good progress. It consisted in having two yawls, the one in advance of the other, carrying out a warp of some hundred yards in length, making it fast to a tree, and then drawing the barge up to that tree by the warp. When that warp was coiled, the yawl in advance had another laid, and so on alternately. From ninety to an hundred days was a tolerable passage from New Orleans to Cincinnati. In this way, the intercourse between Pittsburgh, Cincinnati, Louisville, Nashville, and St. Louis, for the more important purposes of commerce, was kept up with New Orleans. One need only read the journal of a barge on

such an ascent, to comprehend the full value of the invention of steam boats. They are now gone into disuse, and we do not remember to have seen a barge for some years, except on the waters above the mouth of the Ohio.

The keel boat is of a long, slender and elegant form, and generally carries from fifteen to thirty tons. Its advantage is in its small draft of water, and the lightness of its construction. It is still used on the Ohio and upper Mississippi in low stages of water, and on all the boatable streams where steam boats do not yet run. Its propelling power is by oars, sails, setting poles, the cordelle, and when the waters are high, and the boat runs on the margin of the bushes, 'bush-whacking, or pulling up by the bushes. Before the invention of steam boats, these boats were used in the proportion of six to one at the present time.

The ferry flat is a scow-boat, and when used as a boat of descent for families, has a roof, or covering. These are sometimes, in the vernacular phrase, called 'sleds.' The Alleghany or Mackinaw skiff, is a covered skiff, carrying from six to ten tons, and is much used on the Alleghany, the Illinois, and the rivers of the Upper Mississippi and Missouri. Periogues are sometimes hollowed from one very large tree, or from the trunks of two trees united, and fitted with a plank rim. They carry from one to three tons. There are common skiffs, canoes and 'dug-outs,' for the convenience of crossing the rivers; and a select company of a few travellers often descend in them to New Orleans. Hunters and Indians, and sometimes passengers, make long journeys of ascent of the rivers in them. Besides these, there are anomalous water crafts, that can hardly be reduced to any class, used as boats of passage or descent. We have seen flat boats, worked by a wheel, which was driven by the cattle, that were conveying to the New Orleans market. There are horse boats of various constructions, used for the most part as ferry boats; but sometimes as boats of ascent. Two keel boats are connected by a platform. A pen holds the horses, which, by circular movement, propel wheels. We saw United States' troops ascending the Missouri by boats, propelled by tread wheels; and we have, more than once, seen a boat moved rapidly up stream by wheels, after the steam boat construction, propelled by a man turning a crank.

But the boats of passage and conveyance, that remain after the invention of steam boats, and are still important to those objects, are keel boats, and flats. The flat boats are called, in the vernacular phrase, 'Kentucky flats,' or 'broad horns.' They are simply an oblong ark, with a roof slightly curved from the centre to shed rain. They are generally about fifteen feet wide, and from fifty to eighty, and sometimes an hundred feet in length. The timbers of the bottom are massive beams, and they are intended to be of great strength; and to carry a burden of

from two to four hundred barrels. Great numbers of cattle, hogs and horses are conveyed to market in them. We have seen family boats of this description, fitted up for the descent of families to the lower country, with a stove, comfortable apartments, beds, and arrangements for commodious habitancy. We see in them, ladies, servants, cattle, horses, sheep, dogs, and poultry, all floating on the same bottom; and on the roof the looms, ploughs, spinning wheels and domestic implements of the family.

Much of the produce of the upper country, even after the invention of steam boats, continues to descend to New Orleans in Kentucky flats. They generally carry three hands; and perhaps a supernumerary fourth hand, a kind of supercargo. This boat, in the form of a parallelogram, lying flat and dead in the water, and with square timbers below its bottom planks, and carrying such a great weight, runs on a sandbar with a strong headway, and ploughs its timbers into the sand; and it is, of course, a work of extreme labor to get the boat afloat again. Its form and its weight render it difficult to give it a direction with any power of oars. Hence, in the shallow waters, it often gets aground. When it has at length cleared the shallow waters, and gained the heavy current of the Mississippi, the landing such an unwieldy water craft, in such a current, is a matter of no little difficulty and danger.

All the toil, and danger, and exposure, and moving accidents of this long and perilous voyage, are hidden, however, from the inhabitants, who contemplate the boats floating by their dwellings on beautiful spring mornings, when the verdant forest, the mild and delicious temperature of the air, the delightful azure of the sky of this country, the fine bottom on the one hand, and the romantic bluff on the other, the broad and smooth stream rolling calmly down the forest, and floating the boat gently forward, present delightful images and associations to the beholders. At this time, there is no visible danger, or call for labor. The boat takes care of itself; and little do the beholders imagine, how different a scene may be presented in half an hour. Meantime, one of the hands scrapes a violin, and the others dance. Greetings, or rude defiance, or trials of wit, or proffers of love to the girls on the shore, or saucy messages, are scattered between them and the spectators along the banks. The boat glides on, until it disappears behind the point of wood. At this moment, perhaps, the bugle, with which all the boats are provided, strikes up its note in the distance over the water. These scenes, and these notes, echoing from the bluffs of the beautiful Ohio, have a charm for the imagination, which although heard a thousand times repeated, at all hours and in all positions, present the image of a tempting and charming youthful existence, that naturally inspires a wish to be a boatman.

No wonder, that to the young, who are reared in these remote regions, with that restless curiosity, which is fostered by solitude and silence, and who witness scenes like this so frequently, the severe and unremitting labors of agriculture, performed directly in the view of such spectacles, should become tasteless and irksome. No wonder, that the young, along the banks of the great streams, should detest the labors of the field, and embrace every opportunity, either openly, or, if minors, covertly to escape, and devote themselves to the pernicious employment of boating. In this view, we may account for the detestation of the inhabitants, along these great streams, of steam boats, which are continually diminishing the number of all other boats and boatmen, and which have already withdrawn, probably ten thousand from that employment. We have seen, what is the character of this employment, notwithstanding all its seductions. In no employment do the hands so soon wear out. It is comparatively but a few years, since these waters have been navigated in any way. Yet at every bend, and every high point of the rivers, where you go on shore for a moment, you may expect to see the narrow mound, and the rude monument, and the coarse memorial carved on an adjoining tree by brother boatmen, to mark the spot, where an exhausted boatmen yielded his breath and was buried.

The bayou at New Madrid has an extensive and fine eddy, into which boats float, almost without exertion, and land in a remarkably fine harbor. It may be fairly considered the central point, or the chief meridian of boats in the Mississippi valley. This bayou generally brings up the descending and ascending boats; and this is an excellent point of observation, from which to contemplate their aspect, the character of boating and the descriptions and the amount of produce from the upper country. You can here take an imaginary voyage to the Falls of St. Anthony, or Missouri; to the lead mines of Rock River, or to Chicago of Lake Michigan; to Tippicanoe of the Wabash, Orleanne point of the Alleghany, Brownsville of the Monongahala, the Saline of the Kenhawa, or the mountains, round whose bases winds the Tennessee; or, if you choose, you may take the cheap and rapid journey of thought along the courses of an hundred other rivers; and in the lapse of a few days' residence in the spring, at this point, you may see boats, which have arrived here from all these imagined places. One hundred boats have landed here in a day. The boisterous gait of the hands, the congratulations of acquaintances, who have met here from immense distances, the moving picture of life on board the boats, in the numerous animals, large and small, which they carry, their different loadings, the evidence of the increasing agriculture above, and, more than all, the immense distances, which they have already traversed, afford a copious fund of meditation. In one place there are

boats loaded with pine plank, from the pine forests of the southwest of New York. In another quarter there are numerous boats with the 'Yankee notions' of Ohio. In another quarter are landed together the boats of 'old Kentucky,' with their whiskey, hemp, tobacco, bagging and bale rope; with all the articles of the produce of their soil. From Tennessee there are the same articles, together with boats loaded with bales of cotton. From Illinois and Missouri, cattle, horses, and the general produce of the western country, together with peltry and lead from Missouri. Some boats are loaded with corn in bulk and in the ear. Others with barrels of apples and potatoes, and great quantities of dried apples and peaches. Others have loads of cider, that has been strengthened by boiling, or freezing. Other boats are loaded with furniture, tools, domestic and agricultural implements; in short, the numerous products of the ingenuity, speculation, manufacture and agriculture of the whole upper country of the west. They have come from regions, thousands of miles apart. They have floated to a common point of union.—The surface of the boats covers some acres. Dunghill fowls are fluttering over the roofs, as invariable appendages. The piercing note of the chanticler is heard.—The cattle low. The horses trample, as in their stables. The swine utter the cries of fighting with each other. The turkeys gobble. The dogs of an hundred regions become acquainted. The boatmen travel about from boat to boat, make inquiries and acquaintances, agree to 'lash boats,' as it is called, and form alliances to yield mutual assistance to each other on the way to New Orleans. After an hour or two passed in this way, they spring on shore, to 'raise the wind' in the village. If they tarry all night, as is generally the case, it is well for the people of the town, if they do not become riotous in the course of the evening; in which case, strong measures are adopted, and the proceedings on both sides are summary and decisive. With the first dawn, all is bustle and motion; and amidst shouts, and trampling of cattle, and barking of dogs, and crowing of the dunghill fowls, the fleet is in half an hour all under weigh; and when the sun rises, nothing is seen, but the broad stream rolling on as before. These boats unite once more at Natchez and New Orleans; and although they live on the same river, it is improbable that they will ever meet again on the earth.

In passing below, we often see a number of boats lashed, and floating together. In travelling over the roofs of the floating town, you have a considerable walk. These associations have various objects. Boats so united, as is well known, float considerably faster. Perhaps the object is to barter, and obtain supplies. Perhaps it is to kill beef, or pork, for fresh provisions. Apples, cider, nuts, dried fruit, whiskey, peach brandy, and drams are retailed; and the concern is for a while, one of great

merriment and good will. Unforeseen moral storms arise; and the partnership, which began in a frolic, ends in a quarrel. The aggrieved discharge a few mutual volleys of the compliments, usually interchanged on such occasions, unleash, and each one manages his boat in his own way.

The order of things in the western country, naturally fosters a propensity for a floating life on the water. The inhabitants will ultimately become as famous, as the Chinese, for having their habitancy in boats. In time of high waters at the mouth of the Ohio, we were on board an immensely large flat boat, on which was 'kept a town,' which had figured in the papers, as a place, that bade fair to rival the ancient metropolis of the Delta of the Nile.—The tavern, the retail and dram shops, together with the inhabitants, and no small number of very merry customers, floated on the same bottom. We have seen a large tinner's establishment floating down the Mississippi. It was a respectable manufactory; and the articles were sold wholesale and retail. There were three apartments, and a number of hands. When they had mended all the tin, and vended all, that they could sell in one place, they floated on to another.

A piece goods store united with a bookstore is no uncommon establishment. We have heard of a large floating blacksmith's establishment; and of another, in which it was contemplated to work a trip hammer. Besides the numerous periogues, or singular looking Spanish and French trading retail boats, commonly called 'chicken thieves,' which scour the rivers within an hundred leagues of New Orleans, there are on all the waters of the West, retail trading boats. They are often fitted up with no inconsiderable ingenuity and show. The goods are fancifully arranged on shelves. The delicate hands of the vender would bear a comparison with those of the spruce clerk behind our city counters. Every considerable landing place on the waters of the Ohio and Mississippi has in the spring, a number of stationary and inhabited boats lying by at the shores. They are too often dram shops, and resorts of all kinds of bad company. A severe inquiry ought to be instituted at all these points, respecting the inmates and practices of these floating mansions of iniquity.

There is no portion of the globe, where the invention of steam boats should be so highly appreciated, as in the valley of the Mississippi. This invention deserves to be estimated the most memorable era of the West; and the name of the inventor ought to be handed down with glory to the generations to come. No triumph of art over the obstacles of nature has ever been so complete. But for this invention, this valley might have sustained a nation of farmers and planters; and the comforts, the arts, refinements and intelligence of the day would have made their way slowly from New Orleans to the lakes, the sources of the Mississippi,

and the Rocky Mountains. Thousands of boatmen would have been slowly and laboriously warping, and rowing, and poling, and cordelling their boats, in a three month's trip up these mighty and long streams, which are now ascended by steam boats in ten days. It may be safely asserted, that in many respects, the improvements of fifty years without steam boats, were brought to this country in five years after their invention. The distant points of the Ohio and the Mississippi used to be separated by distances and obstacles of transit more formidable, in the passing, than the Atlantic. These points are now brought into juxtaposition. Distances on the rivers are not indeed annihilated; but they are diminished to about an eighth of their former extent; and their difficulties and dangers are reduced even more than that. All the advantages of long rivers, such as variety of soil, climate, productions, remain divested of all the disadvantages of distance and difficulty of ascent. The day that commemorates this invention, should be a holiday of interest, only second to that, which gave birth to the nation.

It is, perhaps, necessary to have something of the experience, which we have had, of the slowness, difficulty and danger of propelling boats against the current of these long rivers, fully to estimate the advantages of this invention.—We have ascended the Mississippi in this way for fifty days in succession. We have had but too much of the same kind of experience on the other streams. We consider ten miles a day, as good progress. It is now refreshing, and it imparts a feeling of energy and power to the beholder, to see the large and beautiful steam boats scudding up the eddies, as though on the wing. When they have run out the eddy, and strike the current, it is a still more noble spectacle. The foam bursts in a sheet quite over the deck. The boat quivers for a moment with the concussion; and then, as though she had collected energy, and vanquished her enemy, she resumes her stately march, and mounts against the current five or six miles an hour. We have travelled ten days together between New Orleans and Louisville, more than an hundred miles in a day against the stream. The difficulty of ascending used to be the only one, that was dreaded in the anticipation of a voyage of this kind. This difficulty has now disappeared, and the only one that remains, is to furnish money for the trip. Even the expense, considering the luxury of the fare, and accommodation, is more moderate, than could be expected. A family in Pittsburgh wishes to make a social visit to a kindred family on Red River. The trip, as matters now stand, is but two thousand miles. Servants, baggage, or 'plunder,' as the phrase is, the family and the family dog, cat and parrot, all go together. In twelve days they reach the point proposed. Even the return is but a short voyage. Surely we must resist strong temptations, if we do not become a

social people. You are invited to a breakfast at seventy miles distance. You go on board the passing steam boat, and are transported, during the night, so as to go out in the morning, and reach your appointment. The day will probably come, when the inhabitants of the warm and sickly regions of the lower points of the Mississippi will take their periodical migrations to the north, with the geese and swans, and with them return to the south in the autumn.

We have compared the most beautiful steam boats of the Atlantic waters with those of the Mississippi; and we have seen none, which in splendor and striking effect upon the eye, and the luxury and comfort of accommodation, surpass the Washington, Philadelphia, Lady of the Lake, Florida, and some others, on these waters. We have been amused in observing an Atlantic stranger, who had heard us described by the phrase 'backwoods men,' taking his first survey of such a steam boat. If there be any ground of complaint, it is, that so much gorgeousness offends good taste, and seems to be in opposition to that social ease and comfort, which one would desire in such a place. Certainly, there can be no comparison between the comfort of the passage from Cincinnati to New Orleans in such a steam boat, and a voyage at sea. The barren and boundless expanse of waters soon tires upon every eye, but a seaman's. And then there are storms, and the necessity of fastening the tables, and of holding to something, to keep in bed. There is the insupportable nausea of sea sickness, and there is danger. Here you are always near the shore, always see the green earth; can always eat, write, and study, undisturbed. You can always obtain cream, fowls, vegetables, fruit, fresh meat, and wild game, in their season, from the shore.

A stranger to this mode of travelling would find it difficult to describe his impressions upon descending the Mississippi for the first time in one of these steam boats, which we have named. He contemplates the prodigious construction, with its double tiers of cabins, and its separate establishment for the ladies, and its commodious arrangements for the deck passengers and the servants. Over head, about him, and below him, all is life and movement. He contemplates the splendor of the cabin, its beautiful finishing of the richest woods, its rich carpeting, its mirrors and fine furniture, its sliding tables, its bar room, and all its arrangements for the accommodation of a hundred cabin passengers. The fare is sumptuous, and every thing in a style of splendor, order and quiet, far exceeding most city taverns. You read, converse, walk, or sleep, as you choose. You are not burdened by the restraint of useless ceremony. The varied and verdant scenery shifts about you. The trees, the green islands, the houses on the shore, everything has an appearance, as by enchantment, of moving past you. The river fowl, with their

white and extended lines, are wheeling their flight above you. The sky is bright. The river is dotted with boats above, beside, and below you. You hear the echo of their bugle reverberating from the woods. Behind the wooded point, you see the ascending column of smoke, rising over the trees, which announces, that another steam boat is approaching you. The moving pageant glides through a narrow passage, between an island, thick set with young cotton woods, so even, so beautiful, and regular, that they seem to have been planted for a pleasure ground, and the main shore. As you shoot out again into the broad stream, you come in view of a plantation, with all its busy and cheerful accompaniments. At other times, you are sweeping along for many leagues together, where either shore is a boundless and pathless wilderness. A contrast is thus strongly forced upon the mind, of the highest improvement and the latest pre-eminent invention of art with the most lonely aspect of a grand but desolate nature,—the most striking and complete assemblage of splendor and comfort, the cheerfulness of a floating hotel, which carries, perhaps, hundreds of guests, with a wild and uninhabited forest, it may be an hundred miles in width, the abode only of bears, owls and noxious animals.

The Mississippi may be fairly considered, as the grand trunk of water communication, and the Missouri, Illinois, Ohio, White, Arkansas and Red rivers, the main arteries. Each of these again has its own system of circulation. To the lakes, and the immense distances of the highest boatable waters of the Alleghany, Monongahela, Kenhawa, Cumberland, Tennessee, Yazoo, Mississippi, Missouri, Arkansas and Red rivers, add communications with all the shores and rivers of the northern lakes, the Gulf of St. Lawrence, and the Atlantic sea board by the Ohio and Erie canal, and the Pennsylvania canal; and the numerous connexions of all the western boatable waters by canals, to which these will naturally give birth, and we may safely assert, that this valley is a sample entirely by itself on our globe of the ease and extent of inland water communications. New Orleans cannot have less than 40,000 miles of interior navigation on all her lakes, bayous, and hundreds of boatable streams; without taking into view the added extent of the northern lakes, which will be connected with her by the Ohio canal. For water communication she has no rival nor compeer; and she may be justly denominated, the queen of rivers. The whole western country is as strongly marked off from any other region by the number and extent of its navigable waters, as it is by the greater magnitude of its valley.

We annex the subjoined table, as a complete list of the names and the tonnage of the steam boats at present on the western waters.*

* See Appendix, table No. VIII.

CIVIL HISTORY. Our plan only admits a very brief summary of the more prominent points of those events, which may be supposed to have had a direct bearing upon the progress of the West. It will touch upon the discovery and settlement of Florida, and the country on the Mississippi; the first settlement of the eastern extremity of the valley, by the western extension of Pennsylvania and Virginia over the mountains; the first settlement of Tennessee and Kentucky; those incidents in the war of the revolution that occurred in the west; the settlement of Ohio; the Indian war which ensued upon that settlement; the successive admission of the Western States into the Union; the first use of steam boats; the events of the late war which happened in the West; and its subsequent improvement and prosperity.

The first discovery and settlement of the country west of the Mississippi, was by a Spanish squadron from Cuba, commanded by Ponce de Leon, in 1512. Successive Spanish adventurers visited the country, allured by the hope of finding a visionary spring, which was to sustain those who drank of it in perpetual youth; or the same harvest of golden treasures with their countrymen in Mexico and Peru. The country, though not fertile, abounded in fish and game, and with tribes of fierce savages. Vasquez, Narvaez, and Soto successively visited and surveyed the country. The French commenced a small settlement near St. Augustine, in 1564. It was cruelly destroyed by the Spaniards. The establishment, which they left in place of it, was in turn destroyed by the French.

The settlement of Canada commenced in 1608, and speedily became a strong and populous colony. The honor of having discovered the Mississippi, is claimed both by the Spanish and the French. Marquette and Joliette, two French Missionaries, in 1763, were probably the first Europeans who explored the river. La Salle, a year or two afterwards, followed their track from Canada, built a vessel, called the Griffin, on the lake, with which he crossed those lonely waters; descended the Mississippi; and by his more extended survey, his greater enterprize, his adventures and misfortunes, identified his name with the Mississippi, as its discoverer.

The Spanish made various unsuccessful efforts to form establishments in Florida. They renewed those efforts, until they founded a feeble colony in East Florida; and gradually extended their settlements from St. Augustine to Pensacola, in West Florida. They had been in undisturbed possession of that country more than fifty years, before the French began to settle the Illinois country. Not long afterwards they descended the Mississippi, and formed settlements at Biloxi and Mobile, in Florida. It was some time afterwards that they founded St. Genevieve and St. Louis, on the west shore of the Mississippi. The Illinois colony followed

the chase in close intimacy with the Indians. They learned to cultivate maize from them; and in their exceedingly fertile country soon introduced the cultivation of wheat.

The first French settlement on the Lower Mississippi, that acquired importance, was that made at New Orleans, in 1717, which became the germ of the respectable colony of Louisiana. The early periods of Florida and Louisiana are marked only by the customary incidents of commencing establishments in the American wilderness. Settlements were commenced and abandoned. Frequent quarrels occurring with the Indians, made a universal feature of these, in common with all other similar beginnings. When France and Spain were at war, as happened more than once during these annals, these remote colonies uniformly felt the effects. Expeditions against each other were fitted out, accompanied by all the Indians they could enlist under their standard.

The first settlers of Illinois and Missouri were chiefly hunters from Canada, addicted to the woods. Louisiana was peopled by immigrants directly from France, many of whom were persons of rank and family. These military adventurers, in a remote country, and in want of wives, were sometimes supplied by young ladies, selected in the parent country without much discrimination, sent over the sea, and married in mass the first night of their arrival.

The Spanish province of Florida derived its chief importance from its proximity to Cuba. Cooler and healthier than the burning climate of Havana, it was considered a retreat from that city; and beside occasionally furnished it with provisions. Various circumstances concurred to give slavery an early and extensive introduction into Louisiana. Agriculture, though among the last objects contemplated by the inhabitants, was forced upon them by circumstances. Apparently ignorant of the exhaustless fertility of the soil, the French for a long time imported their provisions from the parent country, or the Spanish colonies. Wars and the occasional suspension of their intercourse with France, taught them the necessity of securing a less precarious subsistence from the soil.—Illinois early sent down flour to Louisiana. The culture of rice was introduced with great success, to which were afterwards added cotton and sugar. The last important article was first cultivated in 1751, from cane brought from Hispaniola. It was abandoned, and effectually resumed in 1794, by Etienne Boré, a planter from Illinois.

Different enumerations of the inhabitants gave results as follow:—In 1769, the population of Upper and Lower Louisiana, was 13,538; and of New Orleans, 3,190. In 1785, 32,114; New Orleans, 4,980; in 1788, 42,611; New Orleans, 5,338; in 1810, by the census taken by order of the American government, Louisiana alone contained 76,566; and New Orleans, 24,552.

Could we present the picture of the pursuits and manners of the colonists of the Mississippi and Florida, in the commencing periods of their history, it would be striking from its freshness and simplicity. The French, in particular, were remarkable for a talent of ingratiating themselves with the savages; and for an easy amalgamation with them; at first from natural courtesy, which soon became a real inclination and a habit. The soil was fertile, the climate mild, and the chase inexhaustible. Their choice of selection in a forest or prairie, extended over eight hundred leagues; unlike other European immigrants, who generally preferred to settle themselves at a distance from each other, for the sake of range for their domestic animals, the French manifested propensities both vagrant and social, and each in the highest degree. Their villages, though an hundred leagues from each other, were built with such narrow streets, that the villagers could carry on their voluble conversations across the way. It gratified their national ambition to maintain a preponderating influence among the savage tribes. The pursuit of the young men was to ascend the long rivers for furs and peltries, and to negotiate marriages. When they returned, dances and copious narratives of their adventures and exploits signalized their holiday of repose. Such is an outline of the modes of existence of the French in these early times, in Kaskaskias, Cahokia, Vincennes, St. Genevieve, St. Louis, St. Charles, the Post of Arkansas, Natchitoches, and Natchez.

At New Orleans there was always a certain number of people of fashion, a kind of court, a theatre, and the semblance of more polished, but probably less happy amusements. Many of the inhabitants were people of family, and the leading men military characters. The first settlers of Louisiana were probably of higher rank, than those of any other colony in North America, if we except Mexico.

The lower classes had their dogs and guns, and Indian beauties; and to accommodate their vagrant propensities, there were rivers of a thousand leagues to ascend. An unexplored and unbounded forest full of game, opened sufficient scope to their imagination and enterprize. It was perhaps a fortunate trait in their character, certainly an amiable one, that they were so easy in forming new associations with the savages, the only companions they could expect in these remote deserts, where they heard from France seldom more than once in a year. Their descendants, who inhabit these regions, speak of their fathers as a favored race of mortals, and of those times as a golden age.

From New Orleans and Mobile, the exports were considerable, consisting of cotton, indigo, poultry, furs, hides, tallow, pitch, tar, ship timber, and other raw materials. The coast above New Orleans was already beginning to be that highly cultivated district, which it has since become.

The agriculture and exports went on steadily advancing, during all its political changes and transfers.

The settlements of the Mississippi valley began in its southwest and northeast extremities, the one point two thousand miles remote from the other. From these points, the population gradually extended, until they met in the centre.

Pittsburgh, at first occupied by the French, and called Duquesne, and afterwards Fort Pitt, may be considered the hive, or parental stock of the Anglo-American settlements in the western country, which have outnumbered the population of the much more ancient French settlements of Illinois and Louisiana, in the proportion of fifty to one. There were a few sparse settlements on the upper waters of the Ohio and Monongahela, as early as 1750. These settlements were made under the sanction of the English Ohio company, expressly with the purpose to restrain the French encroachments in that quarter. In pursuance of their plan to connect their settlements in Canada and Louisiana, they had established a fort at the junction of the Alleghany and Monongahela. In 1763 this establishment fell into the hands of the English, and its name was changed from Fort Duquesne to Fort Pitt. The convenience and importance of its position soon attracted a considerable number of inhabitants. Red Stone, now Brownsville, began the settlements on the Monongahela. These two towns were the nucleus of the establishments in West Pennsylvania and Virginia.

As early as 1750, the French had established some small posts on the Alabama, Tombigbee and Tennessee rivers. In 1757, the English built Fort Loudon on the north bank of the Little Tennessee, near the mouth of Tellico River. The object was to secure the fertile valley of the Tennessee against the occupation of the French, as an asylum for American immigrants; and to defend the frontier settlements against the invasions of the savages. In 1760, this fort was taken by the Cherokees; and three hundred men, women and children were slain, and all the Anglo-American inhabitants of Tennessee destroyed.

In 1761, Colonel Grant led a strong force into the Cherokee country, chastised the savages, and compelled them to sue for peace. From that time, immigrants from Pennsylvania and Virginia began to find their way into the country, and to name the mountains and rivers. These hunters and adventurers broadened the circle of population, and gradually penetrated into the interior of East Tennessee.

The first settlement of Tennessee and Kentucky were nearly contemporaneous. The name of the famous Daniel Boone is identified with the discovery and settlement of both. Kentucky was first explored by Finley, from North Carolina, in 1767. Finley, Boone, Harrod and Lo-

gan are among the conspicuous names of the hardy primitive adventurers into this fertile wilderness. Sevier, Tipton and Blount hold the same rank among the precursors in the settlement of Tennessee.

Few colonies have existed, that can produce annals of deeper interest, than those which record the origin and progress of these states. The patriarchal pioneers of these backwoods men, were people of a peculiar and remarkable order, trained by circumstances to a character, which united force, hardihood, and energy in an astonishing degree. Opinion has generally invested them with a predominance of rough traits, and rustic habits approximating the character of the Indians. They were in fact as much distinguished by an ample basis of gentlemanly character, and chivalrous notions of honor and justice, as for strength, firmness and bravery.

There is an indescribable charm in becoming intimately acquainted with these noble founders of the empire of the west, from their first fixing their families in the selected spot in the forest, through their conflicts with the Indians, the difficulties incident to solitude, distance from all social comforts, and exposure to all the dangers of a strange climate; until their cabins are replaced by houses, and their houses by mansions; until their stations are converted to villages, and the villages to towns; and until these sparse beginnings in the unexplored wilderness full of savages and wild beasts become powerful states. Imagination would recoil from the dreary uniformity of these early annals, in recording Indian assaults, burnings, murders, and all the ruthless manifestations of un pitying and unsparing savage vengeance, were not the picture relieved by the reckless heroism of the undaunted spirits, that put a strong and cheerful hand to the first improvements, every inoment surrounded by these savages.

Four counties were constituted, by law, in Kentucky, in 1783.—Boonsborough, Harrodsburgh, Limestone, now Maysville, Louisville and Lexington, were among the earliest and most conspicuous foundations in Kentucky. Knoxville and Nashville sustain the same relation to the early history of Tennessee, the former being settled in 1782, and the latter in 1784. Among the records of Indian assault and revenge, the severest disaster in the history of the settlement of Kentucky, is that of the defeat of the Kentuckians at the Blue Licks, in 1782, in which sixty-one were slain, and eight made prisoners. The first newspaper printed in Kentucky, was printed at Lexington, August, 1787.

As early as 1785, the people of Kentucky began to discuss the expediency of becoming an independent State. No little difficulty occurred in settling the preliminary arrangements, and obtaining the unqualified assent of Virginia, the parent State.

In pursuing measures to become an independent State, Tennessee found more difficulty than Kentucky. Beside the same opposition from North Carolina, as Kentucky encountered from Virginia, the people were divided among themselves. A portion of the inhabitants, who wished to establish a State independent of the consent of North Carolina, the parent State, constituted themselves into a republic called Frankland. After an inefficient war of words with the authorities of North Carolina, and after some blood had been spilt in the cause, the new republic was merged in the State of Tennessee, which was admitted into the Union in 1796. The annals of East and West Tennessee, present a dreary series of Indian murders, sometimes of individuals, sometimes of whole families, down to as late a period as three or four years after the establishment of the federal government. Imagination can scarcely realize, that in this great and powerful State, now so prominent a member of the confederacy, the Indian war whoop and the shrieks of assailed women and children were heard, and the blaze of houses and settlements, which the Indians had fired, were seen, after the year 1790, and in districts, where Indians are now as seldom seen, as in Washington or Philadelphia. The first Tennessee newspaper was printed at Rogersville, in November, 1791. It was called the Knoxville Gazette.

The most prominent trait of character in the people of these two States, from the commencement, was a sturdy spirit of independence, and the most vigilant jealousy of their rights. These traits were abundantly put forth in their discussions with their parent States, touching the question of their separation; and in the guarded manner in which they weighed the extent, the right and influence of federal jurisdiction, and in their extreme suspicion, touching the manner in which congress vindicated their claims to the free navigation of the Mississippi.

The commencement of the great State of Ohio, at present the fourth in point of size in the Union, and completing the chain of population between the eastern and western divisions of the settled portion of this valley, was of still more recent date. The progress of this great State has no parallel in the history of colonies, in point of advancement in national wealth, population, strength, and improvement of every kind. Forty years since, it was in the occupation of savages. It now numbers a million of inhabitants, a hundred and thirty thousand militia, two canals, one, three hundred and thirty miles in length, one considerable and rapidly advancing city, a great number of towns, and a hundred populous villages. Handsome houses are springing up every year. Large manufacturing establishments are constantly arising, emulating the same order of things in the Atlantic country. A mass of farmers is spread over the whole State, rich in rural abundance, in simplicity of manners, and the materials

of genuine independence. Of its schools, colleges, manufactories, and national improvements, any State, however advanced in improvement, might be proud. All this progress has been from an innate principle of vigor, without the forcing aid of speculation, opulence, or power; and is a triumph so recently won from the forest, that on all sides we still see the remains of the original trees in the fields.

The order of settlement in this State, as if fashioned from that of the Mississippi valley, commenced almost at the same time in its eastern and western extremities. As France claims the paternity of the settlements along the course of the Mississippi, and North Carolina and Virginia, of Kentucky and Tennessee, Ohio may be considered the offspring of New England and New Jersey. The famous wagon which carried out the first settlers from Massachusetts to Ohio, started in 1788. General Putnam and Dr. Cutler may be estimated the pioneers of the settlement of Marietta.

Judge Symmes, with a number of settlers from New York, New Jersey and Western Pennsylvania, commenced the settlement between the two Miamis, at the point which is now Columbia, in November, 1789. Fort Washington was established on the present site of Cincinnati, in the same year. This establishment was the germ of the town, which was originally called Losantiville. Ludlow, Filson, Denman, and Patterson were the original purchasers of the town plat. In 1789, the settlement numbered twenty log cabins, two marriages were celebrated, and the first child was born. The first court was organized in 1790, and the name of the place changed to Cincinnati.

The settlements, thus commenced at Marietta and Cincinnati, rapidly extended on every side, until checked by the Indian war in 1791. From that period, commenced the same gloomy and uniform series of Indian massacres, assaults and burnings, that signalized the beginnings of all the American settlements. The disastrous campaign of General St. Clair for a while arrested the progress of the settlements. Many of the inhabitants of Cincinnati were killed in that campaign, and many other settlers moved for security into Kentucky, which had attained a compactness of population to be fearless of Indian assault. The glorious campaign of Wayne succeeded; and an end was put to this sanguinary warfare in 1795.

From this time, there was a rush of immigration towards the Ohio valley. The wonderful tale of western exuberance once more circulated with effect along the whole range of the Atlantic country. It was no longer counterbalanced by the dread of the Indian scalping knife. All the great roads of approach to the western country, were crowded with adventurers, directing their course towards the land of promise; and fleets

of boats were continually floating them down the Ohio. The settlements diverged from Marietta on the one hand, and Cincinnati on the other, towards the height of land between the Ohio and the lakes.

Connecticut Reserve was settled chiefly from Connecticut. The extraordinary fertility of the Scioto valley, early attracted inhabitants. The country on the Great Miami, from Cincinnati to Dayton, and thence to Urbana, soon became populous; and the great outline of the State of Ohio rapidly filled with inhabitants, and the noiseless and powerful march of industry transformed the silence of the forest to cultivation, farms, villages and towns.

The first territorial legislature met at Cincinnati in 1799. Representatives from Detroit and Kaskaskias, eight hundred miles apart, were present. The act of Congress admitting Ohio into the Union, was passed in 1801; and in 1803, the present constitution of the State went into operation.

It should have seemed, that this vast country of forests and prairies in the interior of the continent, so recently and sparsely settled, ought to have avoided the horrors of war. Such has not been its fortune. Beside its constant exposure, in all directions, to the covert ambush and the fierce assault of the savages; its shores have been abundantly stained with the blood of men of our own race, brought here by the cupidity and revenge of corrupt princes, separated from it by an ocean; and who received and inflicted death in these remote regions, for causes in which they had no personal concern.

We shall present some of the more important military events, that have occurred in the west, in the unpretending form of annals.

War existing between France and Spain, Pensacola was invaded by a French expedition, aided by four hundred Indians, in 1719. Two vessels of war invested it by sea. The Spanish governor surrendered, on condition that the garrison should be transported to Havana. It was re-taken the same year by a Spanish fleet.

The general massacre of the French at Natchez by the Indians, happened November, 1729. Never was vengeance so complete. The town was crowded with people, assembled to witness a great savage festival. The garrison was filled with warriors, introduced without suspicion. At a given signal, the massacre commenced. Of seven hundred people, scarcely enough were left to carry the tidings. The settlements on the Yazoo and Washita, shared the same fate. The French retaliated this massacre, by nearly extirpating the whole nation of the Natchez.

A remnant of this people took shelter with the Chickasaws, and were demanded by the French. The Chickasaws, in alliance with the English, refused to yield them. Bienville led a French expedition from Mobile

against them, which was aided by an auxiliary French force from Illinois. Both the invading forces were defeated by the Chickasaws. Another expedition by the same officer, with a greater force, was equally unsuccessful.

In pursuance of their plan, to surround the English colonies on the Atlantic sea board by a line of posts, connected by water communications, from the gulf of St. Lawrence to the gulf of Mexico, the French, with equal energy and ingenuity, had arranged a chain of posts, portages, roads and alliances with the Indians, which kept up an easy and unbroken connection between Canada and Louisiana. It was drawn, as a bow string, directly in the rear of the whole English colonial line of settlements. It was an important part of this chain, to add to it a communication between lake Erie and the Ohio. For this purpose, the French established a fort on a water of the Alleghany river, intermediate between lake Erie and the Ohio. The connection was completed by the erection of fort Duquesne at the point where the junction of the Alleghany and Monongahela forms the Ohio, the present site of Pittsburgh.

General Braddock, with a considerable body of regular troops, aided by a force of provincials under General Washington, was ordered to cross the Alleghany mountains, and attack this fort. Obstinate to the regularity of European tactics, against the advice of men experienced in Indian warfare, the British general marched in the depth of the forest into an ambush of French and Indians, concealed among the trees. A masked and murderous fire was opened upon them from behind the trees. In vain he charged an invisible enemy with the bayonet. He was mortally wounded, his force defeated, and the greater portion slain. Here General Washington developed the first traits of his military character. Two horses were killed under him, and four balls passed through his coat. Calm and self possessed, the shield of providence seemed to be cast over him. It was owing to his skill and management, that any part of Braddock's force was saved.

At this time, the eventful victory of Wolfe, upon the heights of Abraham, settled the momentous question, which of the nations, France or England, should have the ascendancy in the future destinies of this continent. Never were more eventful consequences decided by the issue of one combat.

But the French, though subdued in Canada, still retained the ascendancy of their influence over the savages. Instigated by them, the Cherokees slaughtered the English settlers and traders upon the frontiers of the Carolinas. The provincials, to the number of twelve hundred, marched into the country of the Cherokees, and inflicted an ample vengeance.

The Indians, in their turn, attacked Fort Loudon in Tennessee. It surrendered to them; and they violated the convention, by a ruthless and indiscriminate murder of men, women and children. Some of the males were burned at a slow fire, into which their children were thrown; and the mothers were carried into a captivity worse than death.

The war between Great Britain, France and Spain, closed in 1763. Canada was ceded to Great Britain, and Louisiana to Spain. The Spanish commenced their rule in that country by an act of wanton and gratuitous cruelty, executing six distinguished Louisianians, who had opposed the Spanish occupation of the government, and sending six others to the dungeons of Havana.

By this treaty, Florida had been ceded by Spain to the English. A British regiment, descending the Mississippi to take possession of the ceded territory, was attacked by the Tunica Indians, near the site of Fort Adams; Major Loftus, the commander, was killed, and most of the regiment slain. This disaster is commemorated by giving his name to the conspicuous heights on the Mississippi, where he fell.

An interval of nine years of peace, as regarded the quarrels of the different European colonists, succeeded. During this peace the western Indians, if they did not share it, were in some degree restrained in the extent of their assaults and ravages; and the western forests and prairies were peopled in silence by Europeans, or their descendants.

At the close of this interval commenced the war of the American revolution. The French and Spanish in these remote colonies, were soon drawn into the contest. The Spanish, as the allies of the French, made their first effort against the British colony of Florida, their ancient possession.

Galvez, the Spanish governor of Louisiana, assailed Baton Rouge with 2,300 men, aided by battering cannon. The British garrison of 500 men was obliged to surrender. Flushed by this success, in 1780 he fitted out a naval expedition against Mobile, which also surrendered to his forces.

A formidable Spanish fleet, with 12,000 troops on board, soon after sailed from Cuba, to attempt the re-capture of the whole province of Florida; and although the fleet experienced the most signal disasters, from sickness and storms, Pensacola was taken from the British, and the whole province was conquered.

Upper Louisiana was little affected by this war, until near its close.— In 1780 an expedition of English and Indians, from Canada, by way of the lakes, assailed the peaceful French establishments in Missouri.— St. Louis was taken, 60 of the inhabitants slain, and 30 made prisoners.

The French of that vicinity still distinguish that disastrous event by the era of *Pannee du coup*.

They were delivered from their invaders by a respectable force, under the command of the gallant American, General Clark. The expedition under this veteran commander had been fitted out chiefly by Virginia, and ordered into these distant regions to repel the invasion of the English and Indians, as far as possible from her frontiers, which were supposed to be the whole western country. General Clark descended the Ohio with a regiment of infantry, and a troop of cavalry. Part of his force marched by land from Louisville, and in the endurance of incredible hardships, advanced through the swamps and ices of the drowned lands of the Wabash, and met the other part of the force, that had made its way down the Ohio, and up the Wabash by water, before Vincennes, which was in possession of a considerable British force. That force, completely surprised, surrendered at discretion, and suffered a severe retaliation for their cruelties. General Clark unkenelled the savages from their lurking places in these quarters, and carried the American standard in triumph to the Mississippi. The invading forces sent from Canada against St. Louis, shrunk from conflict with the American general, dispersed and made their way back as they could, to Canada.

In 1780, on the mountains that separate N. Carolina from Tennessee, was fought the gallant battle of King's Mountain, in which the backwoods men of Kentucky and Tennessee had so glorious a share. Few actions on record have been more fiercely contested. The British repeatedly charged the mountaineers with fixed bayonets. Ferguson, the British commander, was slain. The enemy left 150 on the field; 610 were made prisoners, and 1500 stand of arms were taken. Only 440 of the foe escaped. Colonels McDowell, Campbell, Shelby, Sevier, in a word, every soldier and officer gained, in that battle, imperishable honor. No victory could have had a more auspicious influence upon the incipient settlements in Kentucky and Tennessee. The peace of 1783 left the country on the Ohio and Mississippi free from all other conflicts, but the unremitting hostility of the savages.

Relieved from one form of apprehension, the western settlers soon met another. The right to navigate the Mississippi, the great western canal of export and import, was refused to the Americans by the Spanish authorities of Louisiana. This became a fruitful source of dispute and re-crimination. The inhabitants of Kentucky and Tennessee, jealous of their rights, and not satisfied with the efforts of Congress to procure them redress, seemed strongly disposed to take justice into their own hands. There appears to have been no less than five distinct parties among them at this time.

The first advocated an independent government in the west, and a commercial treaty with Spain. The second proposed to annex Kentucky to Louisiana. This party was fostered by Spanish intrigue and gold. The third proposed to make war with Spain, and seize Louisiana. A fourth party sustained the American confederation, and proposed to extort the free navigation of the Mississippi, by the menace of an invasion of Louisiana. The fifth wished Louisiana to return under French sway, and that Kentucky should make part of it.

The fires of discord between these parties were fanned by the English, Spanish, and French, according to their respective views. But a new element of political influence was beginning to be felt. It was the course, alike wise, firm, and conciliating, of the Federal Government, which shortly merged all these interests in the overwhelming preponderance of genuine American loyalty. The Spanish treaty of 1795 was the result which, after a series of altercations and difficulties by the Spanish commissioner, went into quiet effect, in 1798.

The western Indians had generally taken part with Great Britain in the war of the revolution. Alarmed at the flood of immigration, which poured into the western country on the return of peace, they still kept up the war on their own account. The southern Indians, under McGillivray, were quieted by a treaty, but the northern Indians stubbornly resisted all efforts at pacification. General Harmer was sent against them with a considerable force. Some hard fighting, with doubtful success, succeeded.

Next year General St. Clair was sent against them with a still larger force. The Indians attacked him, in November, 1792, not far from the Miami villages. A severe and fatal battle for the Americans ensued.—They were completely routed, and more than 600 men, including 38 officers, slain. The wounded, many of whom died, exceeded 260. It was the severest disaster which had befallen the American arms in the West. It gave new extent and energy to the scalping-knife. In the investigation of this bloody affair, which took place before Congress, it was proved, that between 1783 and 1790, 1,500 inhabitants of Kentucky had been massacred, or made prisoners, by the Indians; and an equal number on the frontiers of Pennsylvania and Virginia; and that 120 persons had been killed or made prisoners, a number of whom had been burned at the stake, during thirty days in which the Indians were proposing to make a treaty.

This disaster, and these representations, effectually aroused the people. Gen. Wayne was sent against the Indians. His collected force exceeded 3,000 men. He attacked the combined Indians, and gained a memorable and complete victory. The fugitives took shelter under the guns of a

British fort. General Wayne justly treated the commander of the fort, and the traders sheltered in it, who had obviously supplied the Indians with arms, provisions and ammunition, with very little ceremony, burning their stores and their corn, and driving them to the security of the range of their own guns. In August, 1792, a general treaty with the Indians was concluded, and the desolating horrors of Indian warfare were brought to an end.

This peace, so auspicious to the progress of the west, was soon followed by internal dissensions. The first extension of the federal sway was regarded with suspicion in various parts of the Union. Congress had passed a law imposing duties on spirits distilled in the United States. This law was peculiarly obnoxious to the people of West Pennsylvania. A decided and systematic opposition to government was organized.— Civil processes instituted under that government were resisted. The marshal at Pittsburgh, and General Neville, in whose house he took shelter, were seized, and otherwise treated with violence, to escape which, they made their retreat down the Ohio.

The government conducted with deliberate firmness. After all efforts at conciliation had been exhausted, a strong force was sent over the mountains, commanded by the Governors of Virginia, Pennsylvania and New Jersey. The unanimity of the nation, and the greatness of the force prevented the effusion of blood. The insurgents submitted without resistance. A few were arrested, and one person, who had rendered himself peculiarly obnoxious by his violence, escaped.

The western country meanwhile continued to fill with immigrants with a rapidity unparalleled in the annals of any other country. The woodman's axe was heard in innumerable places in the forest. Commencing towns and villages sprung up among the deadened trees on every side. The surplus produce of the west began to descend the Ohio and Mississippi, in all the whimsical varieties of boats, that float on those streams. At frequent intervals, occasional murders of the people on the frontiers continued to occur, and keep alive the smothered feelings of hatred and revenge, which existed between the two races. But the flood of immigration still continued to flow on, unchecked by these local causes of alarm.

War raged again in Europe. France, Spain and England preyed upon our commerce. Spain, beside joining in the general plunder, shut the port of New Orleans against us. Twelve regiments were added to our army. Three of the old regiments were ordered to a point near the mouth of the Ohio, and other demonstrations of a purpose to redress our wrongs by force, were made.

Early in the administration of Jefferson, Spain restored us the right of deposit at New Orleans, and informed us at the same time, that she had, by a treaty of 1801, ceded Louisiana to the government of France, which had become a republic. A French army which had been appointed avowedly for the purpose of occupying Louisiana, was blockaded in a Dutch port by a British squadron. France wanted money, more than colonies, which she had no navy to occupy or defend; and by the treaty of April, 1803, in consideration of fifteen millions of dollars, she ceded Louisiana to the United States. The immense valley of the Mississippi, in its whole extent, became ours, opening a new era to the west, which we trust, will be dear to freedom, as long as the Mississippi shall roll to the sea.

The famous expedition of Burr occurred in 1806-7. He descended the Mississippi early in January of the latter year with fourteen boats, and from eighty to one hundred men. Being apprised, that his movements were viewed with suspicion, he gave bonds to the authorities of the Mississippi territory, which, however, he soon left, and a reward of two thousand dollars was offered for his apprehension. The professed object of this mad expedition was to occupy and settle a large purchase of lands on the Washita.

His real purpose, founded on erroneous views of the disloyalty of the west, was probably, to detach it from the confederacy, and establish an empire for himself. Some persons were arrested, as accomplices with Burr, among whom were Bollman and Ogden. Burr himself was afterwards tried, and acquitted.

The year 1812 was memorable, as the era of the first successful use of steam boats on the western waters. At the commencement of the winter, the steam boat New Orleans, carrying between three and four hundred tons, descended from Pittsburgh to New Orleans in two hundred and fifty-nine hours. The first experiment was extremely fortunate, and, comparing this passage with that of seventy-five days for the descent of a flat boat from the same place, presented the advantages of steam navigation in strong contrast. Every reflecting person could easily divine, what an immense bearing this wonderful invention of steam boats would have upon the future growth and prosperity of the west. The census of 1810 gave the west nearly a million of inhabitants, about eight times the number of 1799.

It has been seen, that our commerce had been plundered by England, France and Spain. Our political relations with the two former powers had been for some time on a precarious footing. It was a question discussed in Congress with no little asperity, on which of these powers we should make war, to redress our wrongs. It was ultimately determined

to select England, as having inflicted the most palpable injuries, and as being most necessary in her colonial possessions. For some time her ancient influence with the Indians on our northern and western frontiers, had been gathering strength against us. The long suppressed flame burst forth at length in the battle of Tippicanoe. At the close of 1811, the former scenes of savage assault and murder along the frontier settlements were renewed with incessant incursions, and the murder of whole families. Besides the usual instigation and influence of British traders, the famous Shawnee prophet appealed to their bloody superstitions to incite them to general league against us. Generals Harrison and Boyd marched against them with some militia and a regiment of regular troops. In thirty days they arrived in the vicinity of the prophet's town. Soon afterwards, they were attacked in the night by the Indians. It was a scene of confusion and blood. But the prompt and judicious movements of General Harrison and the gallant charge of the regular troops, soon cleared the camp of the assailants. In this hurried and bloody affair, the Americans lost 188 men killed and wounded. Among the slain were some officers of great bravery and merit. The Indian loss was supposed to have been equal.

In June, 1812, war was declared by the United States against Great Britain. An army of 2500 men, consisting of regulars and Ohio volunteers collected at Detroit under the command of General Hull. After a series of skirmishes honorable to Colonels Cass and Miller, General Hull surrendered his whole force, Detroit and the Territory of Michigan to the British General Brock. Never was event more prolific of shame, disgrace and disaster.

The Indians were at once on the alert in hostility to our country from the lakes to the Gulf of Mexico. Colonel Newman of the Georgia volunteers distinguished himself in a desperate and gallant struggle with the Seminole Indians on the Georgia frontier.

About this time the Creeks and Seminoles assaulted and took Fort Mimms on the Tensa, in Mississippi. It was commanded by Major Beasley with 150 men. Three hundred persons, more than half women and children were massacred. Never was savage cruelty more atrocious and unsparing. But seventeen persons escaped. General Jackson, nobly sustained by Generals Coffee and Carroll, was ordered into the Creek country. Encountering disaffection, desertion, want of provisions, and innumerable difficulties of every sort, he succeeded in defeating and humbling them to the sure submission of fear and inability of further annoyance. The victories over the Creeks were named from the places where the battles were fought:—Tallushatchee, Talladega, Emuckfaw, and Tahopeka. The last victory was most terribly decisive. The Indians

left 557 dead; and only four men, along with three hundred women and children were taken prisoners. Humanity recoils from the contemplation of the misery and ruin inflicted upon this fierce and deluded people. But it must be remembered, that they had been incurring this severe reckoning by cruelties and murders for twenty years, crowned with the horrors of Fort Mims. The meed of unshrinking perseverance, the most cool and determined bravery, unflinching patriotism, and able management in the prosecution of this war, must be awarded to General Jackson.

Meanwhile, after the fall of Detroit, savage vengeance raged with unrelenting fury along the whole lake frontier. Various successful incursions were made in retaliation, in which the Indians in their turn experienced deserved chastisement. But the united forces of the British and Indians, were successful in defeating General Winchester, who was captured with some of his officers in the early part of the action. After a severe engagement, the remainder of the American troops, between five and six hundred, surrendered. The Indians violated the terms of the surrender, and a general and horrible massacre ensued, to the perpetual infamy of General Proctor, and his forces, who conducted on this occasion, with little more humanity and good faith, than the savages themselves. This bloody affair is known in the west by the name of the 'massacre of the Raisin.'

During the memorable siege of Fort Meigs by the British and Indians, the besiegers were assailed by Colonel Dudley, who arrived, commanding a brigade of Kentucky recruits. The enemy fled, and the ardor of these brave men carried them too far in the pursuit. They fell into an ambuscade, and suffered severely. A sortie from the Fort, intended as a diversion, in favor of the Kentucky force, was assailed by four times its number; and would have been cut off, but for the gallantry of Lieutenant Gwynne, who opportunely charged the Indians, and saved the detachment. The siege was soon after raised. The American loss, during the thirteen days, which it lasted, was 270 killed and wounded.

At this time Major Croghan gained imperishable honor by his intrepid defence of Fort Stephenson. With only 160 men he was besieged by 500 regulars and 700 Indians under the command of General Proctor. After an unavailing attempt to storm the fort, the besiegers decamped, having lost 150 men in the attempt.

The brilliant and complete victory of the gallant Perry over the British fleet on Lake Erie ensued, and gave the American cause the inestimable advantage of the complete command of the lake. The striking array of a British and American fleet was seen from the shores of Ohio, rounding to the shore to transport the American troops to the invasion of the

Canadian shore. These troops were landed from sixteen vessels and one thousand boats in perfect order, a league below Malden. It was an incident equally novel, cheering and impressive. Malden and Amherstburg were successively occupied. The savages were unkennelled from their dens, where they had been retained, and unleashed; and where they had returned and treasured their horrid trophies of human scalps. Scarcely a volunteer entered these odious places, but had suffered in his person, property, relations or friends by the assaults and massacres here instigated. To show the strongest possible contrast of the deportment of the enemy at the Raisin, private property, houses and persons were spared, not excepting the house of the renegade, Colonel Elliott.

An engagement followed between the American army commanded by General Harrison, and the British and Indians under General Proctor and Tecumseh. The American mounted troops dashed through the enemy's centre, producing the immediate surrender of 472 men and their officers. General Proctor escaped by the speed of his horse.

The Indians contested the battle with much more pertinacity, than their British allies. The renowned Tecumseh put forth all his powers; but after a fierce contest, the savages were defeated; and Tecumseh was slain, it is commonly reported, by Colonel Johnson, in personal contest.

Among the singular trophies of this victory were several pieces of brass cannon, which had been taken from Burgoyne at Saratoga, surrendered by General Hull with Detroit, and now returned to the Americans again. No event in this war had been so directly auspicious to the western country, as this victory. Michigan was recovered; and the British force in Upper Canada broken down. The spirit and confidence of the northern savages were quelled; and the people along the wide western frontier were relieved from their apprehensions, and returned in security and peace to their accustomed habitations.

Scarcely had the Creeks been brought to terms in the south, before the southern people were alarmed with the more formidable apprehensions of British invasion. General Jackson marched with his forces to Pensacola, which was already in the occupation of the British. The British failed in an obstinate naval attack upon Fort Bowyer in Mobile Bay, and were defeated with the loss of 230 men killed and wounded.

The British forces then retired to Pensacola. That town and Barrancas were assaulted, and taken, and the British completely dislodged from all the posts upon that shore. From these achievements General Jackson marched to New Orleans, and put forth all his energy and decision in collecting forces, and placing Louisiana in the best possible state of defence.

A well contested engagement took place between an attack of British barges, and the small American naval force of gun boats near the Rigolet or pass from Lake Borgne into Lake Ponchartrain. The bravery of the Americans was never more honorably conspicuous; though the American gun boats were captured by an overwhelming force. The British loss in the action far exceeded ours.

The British army, which had been hovering on the gulf shore, debarked safely at Bayou Bienvenu, fifteen miles southeast of New Orleans. General Jackson resolved to give them battle. His recent recruits from the upper country were promptly on the field of battle. Commodore Patterson, in the schooner *Caroline* opened a destructive fire upon them. After a warm action, necessarily involved in much confusion from the late hour, in which it was commenced, and from the ignorance of both forces of the ground, and of each other's positions, the British thrice assailed, and beaten, retired a mile. Satisfied with the omen, and this first result of what the British had to expect from us, and aware that the British were double our numbers, General Jackson recalled his troops to their position. Our loss was 139 killed and wounded, and 74 prisoners. The killed, wounded and prisoners of the enemy amounted to 400. Soon after we had the misfortune to lose the schooner, which had so severely annoyed the British.

Fortunately before the great battle of the eighth of January, the long expected reinforcement from Kentucky, amounting to 2250 men, arrived at our camp. The eighth of January dawned, and the British commenced upon our line one of the most obstinate attacks on military record. They were defeated with prodigious slaughter. Their killed, wounded and prisoners exceeded 2600 men. Although the British had been successful in an attack upon the American troops on the opposite bank of the river, compelling the American force, under General Morgan, to retreat, having lost their Generals Packenham, Gibbs and Keane, they felt no disposition longer to contest the possession of a soil that had been so fatal to them, and soon after embarked in their fleet.

It may well be supposed that a scene of exultation, past the power of words to describe, ensued in the camp, and in New Orleans. The brave troops of the west returned to their homes covered with imperishable honors, to hand down the story of their achievements to their children.

In making this glorious defence of the shores of the Gulf of Mexico, and in gaining these victories, General Jackson was obliged to resort to the strong measures of military decision and promptness. We have not space, in which to array the innumerable difficulties he had to encounter from a country but recently accustomed to American rule, peopled to a considerable degree with inhabitants of another language and nation,

the want of arms, the numerical weakness of his force, and his great distance from adequate reinforcements and supplies. The brevity of our sketch accords with our inclination in excluding us from any discussion of the necessity of many of the measures, to which he had resorted; and from questioning the grounds of a reaction of public feeling, which occurred on the return of tranquility. His conduct in proclaiming martial law, and suspending the privilege of *habeas corpus*, removing some suspected citizens, and punishing some deserters with the last rigor of martial law, underwent a severe investigation, at the time, an investigation which subsequent circumstances have renewed with increased asperity.

At this day, however different may be the estimate of the political character of General Jackson, no one can fail to do justice to his wisdom, bravery and good conduct in the prosecution of this campaign. No one can fail to admit, that the emergencies of the case called for such a general, and that weak and vacillating measures could scarcely have failed to have lost the country. On the 13th of the month, peace was officially announced in the camp. On the 24th, General Jackson was prosecuted for contempt of court at the suit of Judge Hall, and was cast in a fine of a thousand dollars. General feeling in view of the sentence was manifested by the citizens. It was proposed to give publicity to that feeling by paying the fine by voluntary contribution. It was no sooner meditated than done. So numerous were the citizens, who desired to contribute, that the entire sum was raised in a few minutes. The general, understanding what was agitated sought the marshal, paid the fine, and avoided an obligation, which his feelings would not allow him to incur. Previous to breaking up his camp, he issued an impressive and affectionate address to his brave companions in arms, and was soon on his way to his home. Grateful and affectionate honors awaited him every where, and most of all at home, where he was welcomed by a reception from his fellow citizens, that must have been more delightful, than all his previous triumphs.

The close of the war, as might be expected, produced a general pacification of the savages on our whole frontier. It was obvious to intellects less vigorous than theirs, that if they had the worst of the contest, when aided by all the power of Britain, and the countenance of the Spanish, they could have little hope, of continuing the contest with us single handed. Profound peace was soon restored to all our borders, from the northeast to the southwest frontier. The tide of immigration which had been arrested during the war, set more strongly towards the western country for having been so long kept back. Shoals of immigrants were seen on all the great roads leading in that direction. Oleanne, Pitts-

burgh, Brownsville, Wheeling, Nashville, Cincinnati, and St. Louis overflowed with them. Ohio and Indiana beheld thousands of new cabins spring up in their forests. On the borders of the solitary prairies of Illinois and Missouri, smokes were seen streaming aloft from the dwellings of recent settlers. The settlements which had been broken up during the war, were re-peopled, and many immigrants returned again to the very cabins, which they had occupied before the war. * Boon's-lick and Salt River, in Missouri, were the grand points of immigration, as were the Sangama and the upper sources of the Kaskaskias, in Illinois. In the south, Alabama filled with new habitations, and the current, not arrested by the Mississippi, set over its banks, to White River, Arkansas, and Louisiana, west of that river. The wandering propensity of the American people carried hundreds even beyond our territorial limits into the Spanish country.—Waggons, servants, cattle, sheep, swine, horses, and dogs, were seen passing with the settlers, bound to immense distances up the long rivers. To fix an hundred miles from another settler was deemed no inconvenience.

† This flood of immigrants of course increased the amount of transport, and gave new impulse to enterprize of every sort. Lands rose above their value, and speculation in them became a raging epidemic. Money, put in circulation by the sale of lands, abounded in the country. Town making, steam boat building,—in short, every species of speculation was carried to a ruinous excess. Mercantile importations filled the country with foreign goods. There were no reasonable foundations to the schemes, and no limits to the extravagance of the people. To give a more fatal extension and efficacy to the mania of speculation, banks were multiplied in all the little towns and villages of the West, whose spurious paper, not predicated on banking principles, nor based upon capital, answered the turn of speculation, as long as the excitement of confidence lasted. The consequence of all this was, that lands rose to double and triple their natural value, and were bought up by speculators. One good effect resulted from the general mischief. Improvements, which would never have been contemplated in another state of things, multiplied.—Towns were built up with good and permanent houses. In three years from the close of the war, things had received a new face along the great water courses, and in all the favorable points of the interior.

New States and Territories grew out of this order of things, like the prophet's gourd. In building up legislation and municipal order, the scramble of strangers, recently brought in contiguity, for the new offices, introduced much bustle and quarrelling. All the legislators were not Solons. A great many forward and plunging young men, whose only qualifications for their great work, were vanity and confidence, composed

the legislatures. Of course a thousand monstrous projects were hatched. The teaching of the past history and experience were not the guides of these confident legislators. The evils that soon resulted from such legislation, gradually worked their own cure. The people were slow to learn; but in most of the States and Territories, after taking lessons for two or three years, they did learn; and returned to the safe and ancient track of history, example and experience.

Meanwhile, this unnatural state of things could not last long. The tide began to ebb, and things to settle to their natural level. The first indication of this change was, the failure of the banks, at first as rare occurrences; but these failures soon became so numerous and common, that the paper, except of the banks of Louisiana, Mississippi, and a very few of the interior banks, became as useless as any other wrapping paper. We have not the data for calculating the amount of loss in the Western country; and patience and moderation of feeling would fail us, in contemplating the enormous mischiefs of legislative swindling. An inconceivable quantity of paper perished, not in the hands of the speculators and those, who had been efficient in generating it; for they foresaw the approaching ruin, and passed the spurious paper away, before the bubble of confidence, on which it was predicated, burst. It finally rested, and perished in the hands of farmers and mechanics,—the honest and the useful members of the community, who had fairly earned the value of the money. May it be a perpetual warning to the legislatures of the West, not to allow demagogues to trifle with their interests, in the introduction of banking schemes based upon any other foundation than solid capital. A more enormous engine of mischief and dishonesty never was introduced into a community.

Lands experienced almost a perpendicular fall. Immigration was suspended. Money ceased to flow into the country from that source. The depreciated money of the country banks was no longer received in payment. The merchants had sold out, on credit, the immense amount of goods, which they had brought into the country, and the debtors had no means of payment left to enable them to make remittances. All the specie of the country made its way to the Atlantic country, to pay for the goods, imported thence. Credit was at an end, and universal distress prevailed. In some of the states, after some experiments of quackery, the legislatures began to consult experience, and desisted from violent political remedies, which, in the end, are sure to aggravate the disease. In other legislatures, where they had not yet learned, that bills made by an engraver, and signed by a president and cashier of a bank with a name, are not necessarily money, they passed laws, whimsically called, relief laws, apparently from the misery and confusion, they created.

And there was a new deluge of bank paper in a new form to remedy the distress, occasioned by the failure of the old. In Kentucky, Illinois, and Missouri, the legislatures plunged deepest into the abyss of relief laws. Loan offices emitted money on the faith of the State, pledged for its redemption. It was soon in the hands of speculators, purchased at a fourth of its nominal value. It was directly ascertained that the remedy was worse than the disease. This evil was longest persisted in where it would have been supposed it would be relinquished first—in Kentucky, the common mother of the Western States, opulent, enlightened, and teeming with men of education and intelligence. So it will ever be, when the rash and presuming legislate, and predicate their schemes on wild theory, and not on the sure teaching of age, tried wisdom, experience, and the analogy of the past.

Were we to descend to the details of State events, and the character of State legislation, volumes would be necessary. Mercantile, mineral, and fur associations were formed and pursued with spirit. Different exploring expeditions, ordered by the government, added to the general and topographical knowledge of the country. An hundred new towns have grown to consequence, and the catalogue of proper names has been ransacked to find names for them. Steam boats have been increased to such numbers, that there are now more than 200 on our waters. Our militia is gradually acquiring efficiency and organization. It is, probably, as numerous in proportion to our population, as that of the Atlantic states. In some of the States the system is lax, or the laws badly enforced; for the militia is neither regularly organized, trained or armed. A levy, *en masse*, in the State of Ohio, would probably bring to the field more fighting men, in proportion to the population, than in any other of the United States. Owing to its recent settlement, few of the inhabitants are past the age for bearing arms. Males immigrate in greater numbers than females; and from these circumstances, there is a large proportion of men capable of bearing arms.

In furnishing a remedy for the incalculable mischief and misery occasioned by universal want of confidence in the local banks and bank paper, the only currency suited to the wants of the West, no influence was felt to be so prompt and salutary, as the establishment of branches of the Bank of the United States among us. It would be easy to show, that local and state banks, however they may meet the necessities of commerce, when established in large commercial towns, with extensive capital always promptly convertible into specie, and however they may be adequate to furnish a sound currency for a narrow circle in their immediate vicinity, are not suited to the position, and the extensive distant commercial relations of the West. Although this country abundantly possessed that,

for which money and bank paper stand as the representatives, our distance from the emporiums of commerce on the sea board, and their dear bought experience of the former worthlessness of our banks, forbade reasonable expectation, that our local paper could be received as a sound currency, beyond the immediate vicinity of its issue. In this establishment was provided a banking system, much better adapted to the wants of an interior country, than of the maritime capitals, enabling the people to obtain loans commensurate with their established credit, and to find in the post office the medium of sure and prompt remittance of a circulation everywhere uniform, and enabling the remotest western dealer to remit to the most distant Atlantic town, and to receive remittances at his writing desk. Western travellers, too, rapidly increasing in numbers, passing to the remotest points, were relieved from the intolerable annoyance of dealing with a broker at the interval of every hundred miles, and continual altercations at taverns and stage offices, as often reminded, that a citizen in one district was a stranger in another of the same country.

Between the general failure of the Western banks, and the operation of this system, western dealers were driven to the extremely burdensome and precarious resource of specie in their foreign transactions. Business and trade were brought to a dead pause. Words would be unavailing to convey an idea of the embarrassment and distress occasioned by this order of things. The evils were spread along a course of 2,000 miles; and were experienced in the remote cabins, as well as the towns and villages on the rivers. Though of an efficacy to create much misery, they were so concealed from the public eye and ear, as to create little sympathy or commiseration for the sufferers. It will be well if history and remembrance preserve these salutary lessons, as solemn warnings to prevent the recurrence of a similar bank mania for the future.

The result of a sound and uniform currency was seen in the restoration of business and credit; and commerce sprung up, like a phoenix, from its ashes. Shapeless and mean looking villages became towns; and the towns in neatness and beauty began to compare with those in the Atlantic country. The best evidence of the change, wrought by this order of things is, that produce and every species of vendible property rose to double and triple its value, during the season of general embarrassment. Since then, the progress of the west in improvement and prosperity has been as rapid, as her citizens could reasonably desire.

IMMIGRATION. Before entering upon a topographical description of the states and territories, we deem it right to dwell a little on the circumstances connected with emigration. In a country, an immense proportion of which is yet wilderness, containing a hundred thousand log cabins,

and annually receiving twice that number of immigrants, a sketch of the circumstances, under which they remove, and make their beginnings in the forest, cannot be without its interest or utility. This work, having for its chief object the physical features and circumstances of the west, seems to call for such an outline, which we draw entirely from our own observation and experience. Nor will an intelligent enquirer turn away from a view of these rustic touches, when calling to mind, that all, which any part of our country can show of elegance, power and improvement, was cradled in similar beginnings; and that it was by these arts, that our whole country became what it is; that the transition from cabins to mansions, and from settlements to cities has taken place under our own observation; and that the germs, which we are describing, promise to evolve a vast and flourishing empire, to which imagination may hardly assign bounds. Still less will they be indifferent to the patriot and philanthropist; if we furnish evidence, that no human condition is more susceptible of plenty, independence; and the best enjoyments, which the earth can offer, than that of the tenants of log cabins, who turn the soil which share never furrowed before.

To the cabin dwellers themselves, who live amidst what we describe, such sketches may be gratuitous. But we hope, they will have interest with another class of readers, who have ideas as indistinct of the modes and contrivances of a settler on the virgin soil, as those of the colonists of the Greeks in Asia Minor, or the Romans in Spain, Gaul, and Africa. With what intense interest should we now read the diary of one of the first settlers at Plymouth, Jamestown, or Mexico, giving the diurnal details of his progress in building, enclosing, and advancing, from the first necessity of a shelter from the elements, to comfort, convenience and elegance! The mind delights to trace mighty streams to their fountains; and the power, improvement and splendour of states, to the germ of their inception. How few traces, by which to gratify this interest, remain! To the greater number of even western readers, a faithful picture of the primitive habitations of the country, and the result of the first efforts of agriculture presents a view of things already gone by.—Our ideas of the first cabins of the Puritans at Plymouth, their first planting and gardening, their first social intercourse and festivities, by which they solaced their solitude and privations, are but dim and uncertain imaginings. Even the memorials of the beginnings of the French in Illinois and Louisiana, are fast perishing, unrecorded from vision and memory.

But the chief utility, which we hope from the following sketch, is to enable the reader, who contemplates becoming an immigrant, to acquaint himself in advance, with some of the circumstances of his undertaking, and to anticipate what he may be called to do, enjoy, or suffer.

We would be glad to furnish him with some elements, on which to settle the expediency of immigration in advance; by showing him in contrast, some of its intrinsic advantages and disadvantages. If a just balance could be struck between the actual enjoyment of those, who live and die, in the old settled portions of the country, and those who emigrate, and settle in the wilderness, every actual immigrant will admit, that it would be far from being an abstract discussion of the nature and chances of happiness.

The advantages and disadvantages of emigration in the abstract, are partly physical, partly moral. The inducements to it arise, with most of our actions, from mixed motives. The greater part of the European emigrants, particularly the Germans, flying from poverty and oppression, come to the west with the unmixed motives to become free land holders, and to purchase cheap and rich lands. But the case is otherwise with the far greater portion of those, who emigrate from the old states of our own country. Imagination exercises more influence even upon minds the most uneducated, than we are ready to suppose. There is no person, about to place himself in a remote and untried position, but will find on examination, that the new scene, viewed in anticipation, is invested with a coloring of the imagination, that has a powerful bearing upon his thoughts and determinations. What mind ever contemplated the project of moving from the old settlements over the Alleghany mountains, and selecting a home in the west, without forming pictures of new woods and streams, new animals and vegetables, new configurations of scenery, new aspects of men and new forms of society, novelty in the most settled mental associations with the phenomena of nature, winds, clouds, rains, snows, thunder, and all the accidents of climate; new hopes, in a word, of chasing down, in a new and far country, that phantom of our desires, always pursued in things without us, and never found, except within us, happiness?

After the long vexed question whether to remove or not, is settled, by consulting friends, travellers and books, the next step is to select the route, and arrange the preparations for it. The universality and cheapness of steam boat and canal passage and transport, have caused, that more than half the whole number of immigrants now arrive in the west by water. This remark applies to nine tenths of those that come from Europe and the northern states. They thus escape much of the expense, slowness, inconvenience, and danger of the ancient, cumbrous and tiresome journey in wagons. They no longer experience the former vexations of incessant altercation with landlords, mutual charges of dishonesty, discomfort from new modes of speech and reckoning money, from breaking down carriages and wearing out horses.

But the steam boats and canal boats have their disadvantages. Cast perhaps, for the first time among a mixed company of strangers, the bashful mother and the uneasy and curious children, present an ample specimen of their domestic training; and how much they have profited by that universal education, about which every one talks. But though they may mutually annoy, and be annoyed, their curiosity is constantly excited, and gratified; their hunger abundantly appeased; and they occasionally form pleasant intimacies with their fellow travellers. If travelling be a mode of enjoyment, these unsated and unhackneyed travellers probably find, on the whole, a balance of enjoyment in favor of the journey of immigration.

The chances are still more favorable for the immigrants from Virginia, the two Carolinas and Georgia, who, from their habits and relative position, still immigrate, after the ancient fashion, in the southern wagon. This is a vehicle almost unknown at the north, strong, comfortable, commodious, containing not only a moveable kitchen, but provisions and beds. Drawn by four or six horses, it subserves all the various intentions of house, shelter and transport; and is, in fact, the southern ship of the forests and prairies. The horses, that convey the wagon, are large and powerful animals, followed by servants, cattle, sheep, swine, dogs, the whole forming a primitive caravan not unworthy of ancient days, and the plains of Mamre. The procession moves on with power in its dust, putting to shame and uncomfortable feelings of comparison the northern family with their slight wagon, jaded horses, and subdued, though jealous countenances. Their vehicle stops; and they scan the strong southern hulk, with its chimes of bells, its fat black drivers and its long train of concomitants, until they have swept by.

Perhaps more than half the northern immigrants arrive at present by way of the New York canal and Lake Erie. If their destination be the upper waters of the Wabash, they debark at Sandusky, and continue their route without approaching the Ohio. The greater number make their way from the lake to the Ohio, either by the Erie and Ohio, or the Dayton canal. From all points, except those west of the Guyandotte route and the national road, when they arrive at the Ohio, or its navigable waters, the greater number of the families 'take water.' Emigrants from Pennsylvania will henceforward reach the Ohio on the great Pennsylvania canal, and will 'take water' at Pittsburgh. If bound to Indiana, Illinois or Missouri, they build or purchase a family boat. Many of these boats are comfortably fitted up, and are neither inconvenient, nor unpleasant floating houses. Two or three families sometimes fit up a large boat in partnership, purchase an 'Ohio Pilot,' a book that professes to instruct them in the mysteries of navigating the Ohio; and if the Ohio be mode-

rately high, and the weather pleasant, this voyage, unattended with either difficulty or danger, is ordinarily a trip of pleasure. We need hardly add, that a great number of the wealthier emigrant families take passage in a steam boat.

While the southerner finds the autumnal and vernal season on the Ohio too cool, to the northerner it is temperate and delightful. When the first wreaths of morning mist are rolled away from the stream by the bright sun, disclosing the ancient woods, the hoary bluffs, and the graceful curves and windings of the long line of channel above and below, the rich alluvial belt and the fine orchards on its shores, the descending voyagers must be destitute of the common perceptions of the beautiful, if they do not enjoy the voyage, and find the Ohio, in the French phrase, *La belle riviere*.

After the immigrants have arrived at Cincinnati, Lexington, Nashville, St. Louis, or St. Charles, in the vicinity of the points where they had anticipated to fix themselves, a preliminary difficulty, and one of difficult solution is, to determine to what quarter to repair. All the towns swarm with speculating companies and land agents; and the chance is, that the first inquiries for information in this perplexity will be addressed to them, or to persons who have a common understanding and interest with them. The published information, too, comes directly or indirectly from them, in furtherance of their views. One advises to the Wabash, and points on the map to the rich lands, fine mill seats, navigable streams and growing towns in their vicinity. Another presents a still more alluring picture of the lands in some part of Illinois, Missouri, the region west of the lakes, and the lead mines. Another tempts him with White River, Arkansas, Red River, Opelousas, and Attakapas, the rich crops of cotton and sugar, and the escape from winter, which they offer. Still another company has its nets set in all the points, where immigrants congregate, blazoning all the advantages of Texas, and the Mexican country. In Cincinnati, more than in any other town, there are generally precursors from all points of the compass, to select lands for companies, to follow. There were such here both from Europe and New England; and we lately read advertisements, that a thousand persons were shortly to meet at St. Louis, to form a company to cross the Rocky Mountains, with a view to select settlements on the Oregon.

When this slow and perplexing process of balancing, comparing and fluctuating between the choice of rivers, districts, climates, and advantages, is fixed, after determination has vibrated backwards and forwards, according to the persuasion and eloquence of the last adviser, until the purpose of the immigrant is fixed, the northern settler is generally borne to the point of debarkation, nearest his selected spot, by water. He

thence hires the transport of his family and moveables to the spot; though not a few northern emigrants move all the distance in wagons. The whole number from the north far exceeds that from the south. But they drop, in noiseless quietness, into their position, and the rapidity of their progress in settling a country is only presented by the startling results of the census.

The southern settlers who immigrate to Missouri and the country south west of the Mississippi, by their show of wagons, flocks and numbers create observation, and are counted quite as numerous, as they are. Ten wagons are often seen in company. It is a fair allowance, that a hundred cattle, beside swine, horses and sheep, and six negroes accompany each. The train, with the tinkling of an hundred bells, and the negroes, wearing the delighted expression of a holiday suspension from labor in their countenances, forming one group; and the family slowly moving forward, forming another, as the whole is seen advancing along the plains, presents a pleasing and picturesque spectacle.

They make arrangements at nightfall to halt at a spring, where there is wood and water, and a green sward for encampment. The dogs raise their accustomed domestic baying. The teams are unharnessed, and the cattle and horses turned loose into the grass. The blacks are busy in spreading the cheerful table in the wilderness, and preparing the supper, to which the appetite of fatigue gives zest. They talk over the incidents of the past day, and anticipate those of the morrow. If wolves and owls are heard in the distance, these desert sounds serve to render the contrast of their society and security more sensible.* In this order they plunge deeper and deeper into the forest or prairie, until they have found the place of their rest.

The position for a cabin generally selected by the western settlers is a gentle eminence near a spring, or what is called a *branch*, central to a spacious tract of fertile land. Such spots are generally occupied by tulip and black walnut trees, intermixed with the beautiful *cornus florida* and *red bud*, the most striking flowering shrubs of the western forests.

Springs burst forth in the intervals between the high and low grounds. The brilliant red bird seen sitting among the shrubs, or perched on a tree, in its mellow whistle seems welcoming the immigrant to his new abode. Flocks of paroquets are glittering among the trees, and gray squirrels are skipping from branch to branch. The chanticleer rings his echoing note among the woods, and the domestic sounds and the baying of the dogs produce a strange cheerfulness, as heard in the midst of trees, where no habitation is seen. Pleasing reflections and happy associations are naturally connected with the contemplation of these beginnings of social toil in the wilderness.

In the midst of these solitary and primeval scenes the patient and laborious father fixes his family. In a few days a comfortable cabin and other out buildings are erected. The first year gives a plentiful crop of corn, and common and sweet potatoes, melons, squashes, turnips, and other garden vegetables. The next year a field of wheat is added, and lines of thrifty apple trees show among the deadened trees. If the immigrant possess any touch of horticultural taste, the finer kinds of pear, plum, cherry, peach, nectarine and apricot trees are found in the garden. In ten years the log buildings will all have disappeared. The shrub and forest trees will be gone. The arcadian aspect of humble and retired abundance and comfort will have given place to a brick house, or a painted frame house, with fences and out buildings very like those, that surround abodes in the olden countries.

It is a wise arrangement of providence, that different minds are endowed with different tastes and predilections, that lead some to choose the town, others manufactures, and the village callings. It seems to us that no condition, in itself considered, promises more comfort, and tends more to virtue and independence, than that of these western yeomen, with their numerous, healthy and happy children about them; with the ample abundance of their granaries; their habitation surrounded by orchards, the branches of which must be propped to sustain their fruit, beside their beautiful streams and cool beach woods, and the prospect of settling each of their children on similar farms directly around them. Their manners may have something of the roughness imparted by living in solitude among the trees; but it is kindly, hospitable, frank, and associated with the traits, that constitute the stability of our republic. We apprehend, such farmers would hardly be willing to exchange this plenty, and this range of their simple domains, their well filled granaries, and their droves of domestic animals for any mode of life, that a town can offer.

No order of things presents so palpable a view of the onward march of American institutions as this. The greater portion of these immigrants, beside their wives, a few benches and chairs, a bible and a gun, commenced with little more than their hands. Their education for the most part, extended no farther than reading and writing, and their aspirations had never strayed beyond the desire of making a farm. But a sense of relative consequence is fostered by their growing possessions, and by perceiving towns, counties, offices and candidates springing up around them. One becomes a justice of the peace, another a county judge and another a member of the legislative assembly. Each one assumes some municipal function, pertaining to schools, the settlement of a minister, the making of roads, bridges, and public works. A sense of responsi-

bility to public opinion, self respect, and a due estimation of character and correct deportment are the consequence.

This pleasant view of the commencement and progress of an immigrant is the external one. Unhappily there is another point of view, from which we may learn something what has been passing in his mind, during this physical onward progress.

All the members of the establishment have been a hundred times afflicted with that gloomy train of feeling, for which we have no better name than home sickness. All the vivid perceptions of enjoyment of the forsaken place are keenly remembered, the sorrows overlooked, or forgotten. The distant birth place, the remembrance of years that are gone, returning to memory amidst the actual struggles of forming a new establishment, an effort full of severe labor, living in a new world, making acquaintance with a new nature, competing with strangers, always seeming to uneducated people, as they did to the ancients, as enemies, these contrasts of the present with the mellowed visions of memory, all tend to bitterness. We never understand how many invisible ties of habit we sever in leaving our country, until we find ourselves in a strange land. The old pursuits and ways of passing time, of which we took little note as they passed, where there are new forms of society, new institutions, new ways of managing every thing that belongs to the social edifice, in a word, a complete change of the whole circle of associations, feelings, and habits, come over the mind, like a cloud.

The immigrant, in the pride of his remembrances, begins to extol the country he has left, its inhabitants, laws, institutions: The lister has an equal stock of opposite prejudices. The pride of the one wounds the pride of the other. The weakness of human nature is never more obvious, than in these meetings of neighbors in a new country, each fierce and loud in extolling his own country, and detracting from all others in comparison. These narrow and vile prejudices spread from family to family, and create little clans political, social, religious, hating and hated. No generous project for a school, church, library, or public institution, on a broad and equal scale, can prosper, amidst such an order of things. It is a sufficient reason, that one clan proposes it for another to oppose it. All this springs from one of the deepest instincts of our nature, a love of country, which, like a transplanted tree, in removing has too many fibres broken off, to flourish at once in a new soil. The immigrant meets with sickness, misfortune, disaster. There are peculiar strings in the constitution of human nature, which incline him to repine, and imagine that the same things would not have befallen him in his former abode. He even finds the vegetables, fruits, and meats, though apparently finer, less savory and nutritive, than those of the old country.

Under the pressure of such illusions, many an immigrant has forsaken his cabin, returned to his parent country, found this mockery of his fancies playing at cross purposes with him, and showing him an abandoned paradise in the western woods, and father land the country of penury and disaster. A second removal, perhaps, instructs him that most of the causes of our dissatisfaction and disgust, that we imagine have their origin in external things, really exist in the mind.

To the emigrants from towns and villages in the Atlantic country, though they may have thought little of religious institutions at home, the absence of the church, with its spire, and its sounds of the church-going bell, of the village bustle, and the prating of the village tavern, are felt as serious privations. The religious discourses so boisterous and vehement, and in a tone and phrase so different from the calm tenor of what he used to hear, at first produce a painful revulsion not wholly unmixed with disgust. He finds no longer those little circles of company, into which he used to drop, to relax a leisure hour, which, it may be, were not much prized in the enjoyment, but are now felt as a serious want. Nothing shocks him so much, as to see his neighbor sicken and die, unsolaced by the voice of religious instruction and prayer, and carried to his long home without funeral services. These are some of the circumstances, that, in the new settlement, call up the tender recollections of a forsaken home to embitter the present.

These are the dark sides of the picture of immigration. But there is, perhaps, less romance in the American character, than in that of any other people; and every thing in our institutions tends to banish the little that remains. We are a people to estimate vendible and tangible realities. Imaginary and unreal sorrows and disgusts gradually yield before an estimate of the value of abundance and independence. More than half the inhabitants of the western country still dwell in cabins; and to those who know how much general contentment with their lot, moral and sturdy hardihood, guileless honesty, and blitheness of heart these humble establishments generally contain, they bring associations of repose and abstraction from ambitious and artificial wants, and present on the whole, a balance of real and homefelt comfort and enjoyment.

The first business is to clear away the trees from the spot where the house is to stand. The general construction of a west country cabin is after the following fashion. Straight trees are felled, of a size that a common team can draw, or as the phrase is, 'snake' them to the intended spot. The common form of a larger cabin is that, called a 'double cabin,' that is, two square pens with an open space between, connected by a roof above and a floor below, so as to form a parallelogram of nearly triple the length of its depth. In the open space the family take their

meals during the pleasant weather; and it serves the threefold purpose of kitchen, lumber room, and dining room. The logs, of which it is composed, are notched on to one another, in the form of a square. The roof is covered with thin splits of oak, not unlike staves. Sometimes they are made of ash, and in the lower country of cypress, and they are called clap boards. Instead of being nailed, they are generally confined in their place by heavy timbers, laid at right angles across them. This gives the roof of a log house an unique and shaggy appearance: But if the clap boards have been carefully prepared from good timber, they form a roof sufficiently impervious to common rains. The floors are made from short and thick plank, split from yellow poplar, cotton wood, black walnut, and sometimes oak. They are confined with wooden pins, and are technically called 'puncheons.'

The southern people, and generally the more wealthy immigrants, advance in the first instance to the luxury of having the logs hewed on the inside, and the puncheon floor hewed, and planed, in which case it becomes a very comfortable and neat floor. The next step is to build the chimney, which is constructed after the French or American fashion. The French mode is a smaller quadrangular chimney, laid up with smaller splits. The American fashion is to make a much larger aperture, laid up with splits of great size and weight. In both forms it tapers upwards, like a pyramid. The interstices are filled with a thick coating of clay, and the outside plastered with clay mortar, prepared with chopped straw or hay, and in the lower country with long moss. The hearth is made with clay mortar, or, where it can be found, sand stones, as the common lime stone does not stand the fire. The interstices of the logs in the room are first 'chinked;' that is to say, small blocks and pieces of wood in regular forms are driven between the intervals, made by laying the logs over each other, so as to form a kind of a coarse lathing to hold the mortar.

The doors are made of plank, split in the manner mentioned before, from fresh cut timber; and they are hung after an ingenious fashion, on large wooden hinges, and fastened with a substantial wooden latch. The windows are square apertures, cut through the logs, and are closed during the cooler nights and the inclement weather, by wooden shutters. The kitchen and the negro quarters, if the establishment have slaves, are separate buildings, prepared after the same fashion; but with less care, except in the article of the closeness of their roofs. The grange, stable, and corn houses are all of similar materials, varied in their construction to answer their appropriate purposes. About ten buildings of this sort make up the establishment of a farmer with three or four free hands, or half a dozen slaves.

The field, in which the cabin is built, is generally a square or oblong enclosure, of which the buildings are the centre, if the owner be from the south; or in the centre of one side of the square, if from the north. If the soil be not alluvial, a table area of rich upland, indicated to be such by its peculiar growth of timber, is selected for the spot. Nine tenths of the habitations in the upper western states are placed near springs, which supply the family with water. The settlers on the prairies for the most part, fix their habitations in the edges of the wood, that skirts the prairie, and generally obtain their water from wells. The inhabitants of the lower country, on the contrary, except in the state of Mississippi, where springs are common, chiefly supply themselves with water from cisterns filled by rain. If the settlers have slaves, the trees are carefully cleared away, by cutting them down near the ground. The part of the timber, which cannot be used either for rails, or the construction of the buildings, is burned, and a clearing is thus made for a considerable space round the cabin. In the remaining portion of the field, the trees undergo an operation, called by the northern people 'girdling,' and by the southern 'deadening.' That is, a circle is cut, two or three feet from the ground, quite through the bark of the tree, so as completely to divide the vessels which carry on the progress of circulation. Some species of trees are so tenacious of life, as to throw out leaves after having suffered this operation. But they seldom have foilage after the first year. The smaller trees are all cut down; and the accumulated spoils of vegetable decay are burned together; and the ashes contribute to the great fertility of the virgin soil. If the field contain timber for rails, the object is to cut as much as possible on the clearing; thus advancing the double purpose of clearing away the trees, and preparing the rails, so as to require the least possible distance of removal. An experienced hand will split from an hundred to an hundred and fifty rails in a day. Such is the convenience of finding them on the ground to be fenced, that Kentucky planters and the southern people generally prefer timbered land to prairie, notwithstanding the circumstance, so unsightly and inconvenient to a northern man, of dead trees, stumps, and roots, which, strewed in every direction over his field, even the southern planter finds a great preliminary impediment in the way of cultivation. The northern people prefer to settle on the prairie land, where it can be had in convenient positions. The rails are laid zigzag, one length running nearly at right angles to the other. This, in west country phrase, is 'worm fence,' and in the northern dialect 'Virginia fence.' The rails are large and heavy, and to turn the wild cattle and horses of the country, require to be laid ten rails or six feet in height. The smaller roots and the underbrush are cleared from the ground by a sharp hoe, known by the name 'grubbing'

hoe.' This implement, with a *cross cut saw, a whip saw, a hand saw, axes, a broad axe, an adze, an auger, a hammer, nails,* and an iron tool to split clap boards, constitute the indispensable apparatus for a backwoodsman. The smoke house, spring house, and other common appendages of such an establishment, it is unnecessary to describe; for they are the same as in the establishment of the farmers in the middle and southern Atlantic states.

A peach orchard is generally the first object in raising fruit; because it is easily made, and begins to bear the second or third year. Apple orchards, with all good farmers, are early objects of attention. The cultivation of the more delicate garden fruits is generally an object of after attention, if at all. Maize is planted the first year without ploughing. Afterwards the plough becomes necessary. Turnips, sweet potatoes, pumpkins, and melons flourish remarkably on the virgin soil. It is a pleasant spectacle, to see with what luxuriance the apple tree advances. South of 33° the fig tree is substituted for the apple tree. If the log buildings were made of good and durable materials, they remain comfortable dwellings seven or eight years. By this time, in the ordinary progress of successful farming, the owner replaces them by a house of stone, brick, or frame work; and the object is to have the second house as large and showy, as the first was rustic and rude. A volume of details, touching the progress of such establishments, might be added. But this brief, though faithful outline of commencing establishments in the woods, aims to record an order of things that is passing away under our eyes, and which will soon be found only in history.

It is impossible to satisfy the inquiries, that are constantly making, particularly by European emigrants, touching the exact cost of these improvements, and the requisite provisions, cattle and horses, necessary for a commencement. All these things vary, not only according to quality as elsewhere, but according to nearness or remoteness from settlements, according to the abundance or scarceness of the article; in fact, are liable to greater irregularities of price, than in the old settlements. Labor has found its level, and costs nearly the same in the new as in the old states. The average expense of log houses may, perhaps, be rated at fifty dollars, when built on contract. Clearing, grubbing, and enclosing timbered land, so as to prepare it for a crop, costs from six to twelve dollars an acre, according to the heaviness and hardness of the timber, and the ease of splitting rails. The prairie land has a very tough green sward, and costs three dollars an acre to be well ploughed the first time. Lands under good improvement are generally worth from six to ten dollars an acre; and all are aware, that the government price of wild lands, after the first auction sales, is one dollar and twenty five cents an acre.

The most affectionate counsel we would give an immigrant, after an acquaintance with all districts of the Western country of sixteen years, and after having seen, and felt no small part of all we have attempted to record, would be to regard the salubrity of the spot selected, as a consideration of more importance than its fertility, or vicinity to a market; to supply himself with a good manual of domestic medicine, if such a manual is to be found; still more, to obtain simple and precise notions of the more obvious aspects of disease, an acquisition worth a hundred times its cost, and more than all to a backwoodsman; to have a lancet, and sufficient experience and firmness of hand to open a vein; to have a small, but well labelled and well supplied medicine chest; and to be, after all, very cautious about either taking, or administering its contents, reserving them for emergencies, and for a choice of evils; to depend for health on temperance, moderation in all things, a careful conformity in food and dress to circumstances and the climate; and above all, let him observe a rigid and undeviating abstinence from that loathsome and murderous western poison, whiskey, which may be pronounced the prevalent miasm of the country. Let every immigrant learn the mystery, and provide the materials to make good beer. Let every immigrant, during the season of acclimation, especially the sultry months, take medicine by way of prevention, twice or thrice, with abstinence from labor a day or two afterwards. Let him have a Bible for a constant counsellor, and a few good books for instruction and amusement. Let him have the dignity and good sense to train his family religiously; and not to be blown about by every wind of doctrine in religion, politics, or opinions. Let his rifle rust, and let the game, unless it come in his way, live on. Let him cultivate a garden of choice fruit, as well as a fine orchard. Let him keep bees; for their management unites pleasure and profit. Let him prepare for silk making on a small and gradual scale. Let him cultivate grapes by way of experiment. Let him banish unreal wants; and learn the master secret of self possession, and be content with such things as he has; aware that every position in life has advantages and trials. Let him assure himself that if an independent farmer cannot be happy no man can. Let him magnify his calling, respect himself, envy no one, and raise to the Author of all good constant aspirations of thankfulness, as he eats the bread of peace and privacy.

FLORIDA.

LENGTH 550 miles. Mean breadth 120 miles. Between 25 and 31° N. latitude, and 80 and 92° W. longitude from London. Under its former owners, it was separated into two political divisions, whose geographical limits were strongly marked by nature; to wit, East and West Florida. At the southern extent of East Florida, there is a long and narrow peninsula, running a great distance into the sea, and marking the eastern boundary of the gulf of Mexico. It extends northwardly to Alabama and Georgia, east to Georgia, south to the gulf of Mexico, and west to the river Appalachicola, between 80 and 85° W. longitude from London, and 25 and 31° N. latitude. West Florida extends from the limits of East Florida, with the same northern boundaries to the river Perdido, which divides it on the west from Alabama.—This division has ceased to exist, and the two Floridas constitute one government. By the treaty of cession from Spain, it has become an integral part of the American republic, and will soon have a sufficient population to claim admission into the union of the states.

CIVIL DIVISIONS.

Alachua, *Dell*; Duval, *Jacksonville*; Escambia, *Pensacola*; Hamilton, *Miccotown*; Jackson, *Marianna*; Jefferson, *Monticello*; Leon, *Tallahassee*, 896 miles south-west from Washington; Madison, *Hickstown*; Monroe, *Key West*; Moschetto, *Tomoka*; Nassau, *Ferdinanda*; St. Johns, *St. Augustine*, 841 miles south-west from Washington, 292 south-east from Tallahassee; Walton, *Aliqua*; Washington, *Holme's Valley*; Gadsden, ——— Fayette, ———

Climate. This may be considered in some respects a tropical climate. The northern belt, indeed, which lies along the southern limits of Georgia and Alabama, partakes of the cooler temperature of those states, and seems to be beyond the range of the proper cultivation of the Ota-

beite and African sugar cane. The ribband cane will, probably flourish in this division. The regular range of the thermometer throughout the Floridas, from June to the autumnal equinox, is between 84 and 88° Fahrenheit. It sometimes rises above 100°; but this range occurs as seldom, as in the adjoining states. The mercury, probably, ranges lower through the summer, than in the interior of Alabama and Georgia. Even in winter, the influence of the unclouded and vertical sun is always uncomfortable. In the peninsular parts, there are sometimes slight frosts, but water never freezes. The most delicate orange trees bear fruit in full perfection, and the fruit is remarkably delicious. There is generally a sky of mild azure, southern breezes, and an air of great purity. But the evening air is particularly humid, and the dews excessive. Early in winter the rainy season commences. In February and March, there are thunder storms by night, followed by clear and beautiful days. In June, the sultry season commences, and terminates with the autumnal equinox. But, take the climate altogether, there is not, perhaps, on the globe a more delightful one, between the months of October and June. The peninsular parts, being near the tropics, have a higher temperature than West Florida, which is occasionally fanned by Canadian breezes, that sweep the Mississippi valley. The peninsula is subject to tornadoes, like the West Indies. On the Atlantic side of Florida, the eastern, and in West Florida the western trade winds prevail. But in West Florida, after severe thunder storms, northern breezes alternate through the summer. About the time of the autumnal equinox, hurricanes and destructive gales sometimes occur. In the northern parts the influence of the cold breezes from the northern regions, which are covered with snow, are sensibly felt; and then ice forms on the northern exposures of buildings. There are, in particular seasons, indications of considerable humidity over all the country. Though there are never heats and humidity to cause *sugar and salt to melt*, as some writers have asserted. Perhaps there is no point in the Floridas, where humidity is more manifest than about St. Augustine; yet in Spanish times, the citizens of Havana used to resort there, during the sickly months for health, as a kind of Montpelier, and perhaps no southern place at present is found more congenial to the constitution of the people of the United States. The same sudden variations of temperature are felt here, especially in the winter, that constitute so distinct a feature in the climate of all the south-western parts of the United States. The thermometer ranges 30° in a single winter day. Northern people would never conceive, except by inspection, how long fires are comfortable, and how great a portion of the year requires them, in a climate where rivers never skim with ice. From June to October, the frequent rains, and

the unremitting heat are apt to generate the fevers of southern climates, especially in the vicinity of ponds and marshes. Where fields are flooded for rice, and indigo plantations are made, it is invariably sickly. On the other hand, it may be safely asserted, that the districts of Florida, remote from marshes, swamps, and stagnant waters, are healthy. The ever verdant pine forests cover a great extent of this country; and these, in the mind of an inhabitant of the south, are ever associated with the idea of health. At least two thirds of this country are covered with this timber.

Productions. The vegetable kingdom in Florida has a greater variety than any other part of the United States. In the comparatively richer soils, in the hammock lands, on the river courses, and the richer swamps, nothing can exceed the luxuriance and grandeur of the shrubs and trees. The pine forest is almost boundless and inexhaustible; and the pines are of an extraordinary height and beauty. What is called white cedar and cypress, abound in the vast swamps, and this timber grows of great size. Live oaks are frequent, and the tree develops itself here in full perfection.

Our government commenced a plantation of this invaluable species of tree at Deer point, in which, in the year 1829, upwards of 76,000 were growing in a flourishing condition. The secretary of the navy proposed to abandon the cultivation, thinking that the country could never want live oak, when it is indigenous from St. Marys to the Sabine. But there is reason to believe, that the amount of live oak in Florida and Louisiana has been much overrated. Experience has proved, that they are easily cultivated. Groves of these majestic trees are often seen in different parts of Florida, open and arranged in regular forms, surpassing the beauty of the famous parks of the English mansions; probably the plantations of a former generation, of whose civilization and taste these trees are noble memorials. A large, detached live oak, seen at a distance on the verge of a savanna, or on the shore of a river, spreading like an immense umbrella, its head of such perfect verdure, and so beautifully rounded, is a splendid object on the landscape. The cabbage palm, *chamarops palmetto*, is common. This superb tree sometimes raises a clear shaft eighty feet high. The timber resists the gulf worm. Hats, baskets, and mats are manufactured from the leaves. The young head at the stem is edible and nutritive. Wild animals feed on the berries. It is not seen west of St. Andrews bay. The deep swamps present the customary spectacle of innumerable cypress columns, rising from immense buttresses, with interlaced arms at their summit, showing the aspect of a canopy of verdure reared upon pillars. On the hammock lands, the beautiful dog wood trees spread their horizontal branches, and

interweaving them with each other, form a fine deep shade, which completely excludes the sun, and suppresses the growth of all kinds of vegetation under them; presenting in some places, for miles together, a smooth shaven lawn, and an impervious shade. Here is the beautiful pawpaw, with a stem perfectly straight, smooth, and silver colored, and with a conical top of splendid foliage, always green, and fruit of the richest appearance. *Titi* is a shrub filling the southern swamps, as the elder does at the north. It flowers in masses of white ornamental blossoms, and singular strings of covered seeds, that hang on the bushes till winter. Five or six species of pine are found here. The southern extremity of the peninsula of Florida is very rocky. Instead of the trees and shrubs, which are found in the rest of the country, it is covered with mastic, *lignumvitæ*, gum elomy, ovino, wild fig, and mangrove.

There are many traces of ruined towers, desolated Indian villages, indications of former habitation, and much more cultivation, than is now seen in the country. Wherever these traces of former population are observed, are those groves of lime, orange, peach and fig trees, that are spoken of by travellers, as having been found here indigenous to the soil. Wild grape vines abound. *Myrica odorata*, or candle berry laurel is common. From the berries of this shrub, is prepared an excellent kind of wax for candles. It is not unlike the bay berry of the north, except that the shrub is taller, and the berries larger. Among the flowers is the magnificent *Hybiscus*, which, though an herbaceous and annual plant, grows to the height of ten feet, branching regularly in the form of a sharp cone, and is covered with large, expanded and crimson flowers, which unfold in succession, during all the summer months. *Tillandsia usneoides*, long moss, or Spanish beard is common here, and has the same appearance as will be hereafter described in Louisiana. It hangs down in festoons, sometimes ten or fifteen feet in length, like the pendent stems of the weeping willow. Waved by the wind, it catches from branch to branch, and sometimes fills the interval between the trees, as a curtain. It has a long trumpet shaped flower, and seeds so fine as to be hardly visible. These seeds undoubtedly fix in the bark of the trees; and this parasitic plant there finds its appropriate soil. It will not grow on a dead tree. Cattle, deer and horses feed on it, while it is fresh. When properly rotted and prepared, which is done much after the manner in which hemp is prepared, it is an admirable article for mattresses, and stuffing for cushions, saddles, coach seats, and the like. The fibre, when properly prepared, is elastic and incorruptible, and in many respects resembles horse hair, both in appearance and use. The Spanish and natives use it for horse collars, coarse harnessing, and ropes.

The low savannas are covered, like the prairies of the upper country,

with a prodigious growth of grass and flowers. In the swamps, the cane brakes are of great height and thickness, and the rushes and other meadow plants grow to an uncommon size. Some of the reed canes are seen from thirty to forty feet in height. The lakes and creeping bayous, especially in summer, are covered with a most curious growth of aquatic plants, called by botanists, *pistia stratiotes*. They somewhat resemble the vegetable commonly called house leek, and have a beautiful elliptical leaf. It is commonly, but not correctly reported to vegetate on the surface of the water. When the roots of thousands of these plants have twined together, so as to form a large and compact surface, the mass is often drifted by the wind, or current, to a considerable distance. This is the appearance, no doubt, which has given origin to the story of floating islands in the waters of this country. This singular and beautiful vegetation, spreads a verdant plain over the waters, for a great extent. Under it the fishes dart, and the alligators pursue their unwieldy gambols, and multitudes of water fowls are seen pattering their bills among the leaves. The herbarium, though exceedingly rich and diversified, is not materially different from that to be described hereafter.

The cultivated vegetables are maize, beans, potatoes, especially sweet potatoes, it being an admirable country for that fine vegetable, pumpkins, melons, rice, and a variety of esculent roots, particularly a species of *arum*, which is much cultivated in the maritime parts, and has a large turnip shaped root, resembling, when roasted or boiled, a yam in taste.

The pistache is a kind of nut in pods, growing in the ground, abundantly in sandy land, much cultivated both by the Seminoles and Americans. It is baked or roasted in the shell, and is used by confectioners, as a sweet meat.

Tobacco, cotton, indigo, rice, and the sugar cane will be the principal articles of culture. The African and Otaheite cane flourish remarkably well in the southern parts, on the hammock and rich lands, and planters are beginning to turn their attention very much to the cultivation of this article. The coffee tree has been tried on the peninsula; and coffee can unquestionably be raised there; but whether of a kind, or in quantities to justify cultivation, has not yet been sufficiently experimented. The olive has been sufficiently tried, to prove that it flourishes and bears well. A species of cactus is common, on which the cochineal fly feeds; and this will probably become an important article of manufacture. A species of cabinet wood of great beauty grows here, which they call bastard mahogany. It is probably the *Laurus Borbonia*.

Minerals. The country is not rich in this department, although it is affirmed that several kinds of precious stones have been found here, as amethysts, turquoises, and *lapis lazuli*. Ochres of different colors, pit

coal and iron ore are abundant. We have seen beautiful aggregations of little circular nodules of marine petrifications, and splendid specimens of coral and marine shells found on the shores of the gulf. On Mosquito river, there is a warm mineral spring, pouring out, like many other springs of the country, a vast volume of water sufficiently large to fill a basin, in which large boats may float. The water is sulphureous, and is esteemed efficacious in rheumatic, and other affections. It is remarkably pellucid, and filled with fishes.

Animals. There are prairie and common wolves, wild cats, panthers, foxes, rabbits; many beautiful kinds of squirrels, raccoons, Mexican opossums, and woodchucks. The common brown bear is yet seen in the swamps. It is a fine grazing country, and grass abounds in the open pine woods and savannas, and the swamps furnish inexhaustible supplies of winter range. Thus it is an admirable country for raising stock. The rearing of cattle and horses, in times past, has been the chief employment of the small planters. They number their cattle by hundreds, and sometimes by thousands. There are immense droves of deer, and this is the paradise of hunters, though in many places the Indians complain of the scarcity of game. Wolves sometimes assemble in great numbers, and when united or single, are always formidable enemies to the folds and vacheries of the planters. Bears have been killed here of six hundred pounds weight. The inhabitants esteem their flesh a great luxury.

Birds. The ornithology of Florida is probably the richest in North America. There are here immense numbers and varieties of water fowls, especially during the winter, and in the sleeping inlets on the shores of the gulf, on the bayous and creeks. In the woods, and stationary through the winter, are vultures, hawks, rooks, jays, parroquets, woodpeckers, pigeons, turkeys, herons, cranes, curlews, cormorants, pelicans, plovers, blue birds, mocking birds, red birds, and a great variety of the sparrow tribe. The dog wood groves are the resort of vast numbers of the small and singing birds. Among the remarkable birds are the snake birds, a species of cormorant of great beauty.

The robin red breast stays the whole year in Florida. The red sparrow is a beautiful variety of the species found here. The crane, *grus pratensis*, is found here in immense numbers. By some, their flesh is valued as much as that of the turkey. The crying bird is a pelican, remarkable for singular plumage, and its harsh cry. The wood pelican is nearly three feet high, and is seen stalking along the marshes, with his long, crooked beak resting, like a scythe, upon his breast. The painted vulture is one of the curious birds seen on the savannas, gorging on the serpents, frogs, and lizards, roasted by the periodical burning of the grass plains. The

great savanna crane, when standing erect, is nearly five feet high. They fly in squadrons, and have a singular uniformity of flying and alighting. A striking feature of this country is the number, variety, and splendor of the birds, especially those of the aquatic species.

Fish. The coasts, sounds, and inlets abound in excellent fish; and the inland lakes and rivers are stored with such multitudes of them, as cannot be adequately conceived, except by those who have seen them. They are generally of the same kinds that we have named under this head, in our previous remarks upon the Mississippi valley.

We may observe in general, that the fish of this region, especially on the sea coast, are fine. The fish, here called the sun fish, is the same with the trout of Louisiana. It is an excellent fish, and no angling can exceed it. It takes the bait with a spring. What is a matter of curiosity to all the recent settlers in the country, is the multitudes of fish that are seen at the mouths of the immense springs, that burst forth from the ground, of a size at once to form considerable rivers. When the channel of these subterranean streams is struck, by perforating the earth at any distance from the fountain, the hook, thrown in at the perforation, is eagerly taken by the fish, and fine angling may be had, as if fishing in a well. The most common kinds are the sun fish, cat fish, silver or white bream, and the black or blue bream, stingray, scale flounders, spotted bass, sheep's head, drum, shad, &c. Oysters, and other shell fish are excellent and abundant. Alligators and alligator gars are the common enemies of the finny tribes, and they here feed and fatten on the fish. The swamps, lakes, and inlets so abundantly stored with fish, frogs, insects, and every kind of small animals, that constitute the natural food of alligators, would lead us to expect to find this animal in great numbers. There are all the varieties of lizards, that we have enumerated, as belonging to the western country in general. The lakes and rivers abound in tortoises. The great soft shelled fresh water tortoise, when of a large size, has been found weighing fifty pounds, and is esteemed by epicures, delicious food. The gopher is a curious kind of land tortoise, and is by many prized for the table. There are vast numbers and varieties of frogs, and the music of the *Rana boans*, or bull frog, is heard in concert with the cry of the Spanish whip-poor-will, the croaking of tortoises, and the innumerable peopings and gruntings of the amphibious animals and reptiles of the lakes and marshes.

Serpents. They are for the most part the same, as have been described already under this head. Here is seen the riband snake, of a clear vermilion color, variegated with transverse zones of dark brown. It is found about old buildings, and is harmless. Here, also, is the chicken snake, swift, slender, long, and harmless. Its prey is chickens. The

mud asp is a serpent that lives in the muddy creeks, of a livid color, and easily mistaken for an eel. Persons incautiously wading in the mud have been bitten, and the bite has proved mortal. The coach whip snake inhabits the pine barrens. It exactly resembles a coach whip with a black handle, but is perfectly harmless. The bull snake is common on the savannas. It is a large, fierce, and venomous looking snake, uttering, when irritated, a loud, hissing noise; but its bite is harmless. The coach whip snake is common. It is an animal of beautiful colors, six feet long, and as slender as a walking stick. The glass snake, which we have described elsewhere, is seen here. Red and black toads are common. The house frog indicates rain, by being uncommonly noisy before it happens. The little green garden frog changes color, like the camelion; and its note exactly imitates the barking of a puppy. Indeed, so great is the number and variety of these reptiles, that it is the standing jest, when speaking of Florida, to say, that every acre will yield forty bushels of frogs, and alligators enough to fence it.

Insects. Incredible numbers of the small insects, called ephemere, cover the surfaces of the lakes and rivers, supplying abundant food for the birds, frogs, and fishes. Clouds of the gaudiest butterflies hover among the shrubs and flowers. Gnats and mosquitos, as might be expected in such a country, are extremely frequent and annoying, especially about the rice and indigo plantations, being ordinarily found in greatest numbers, where it is most unhealthy. On the open, dry savannas they are neither so frequent nor troublesome; and they decrease in numbers as cultivation advances. The jigger, red bug, and mosquito are most annoying.

Bays, Inlets, and Sounds. From the uncommon levelness of the country on the sea shore, and from the numerous rivers that intersect it, there is no part of the world, that for the same extent, has so many inlets, sounds, narrow passes of water between islands, and communications of one point of the shore with another, by an inland channel. The whole coast is almost a continued line of these sounds; and it is beyond a doubt, that at a comparatively small expense, a canal communicating with the sea, in an hundred places, might be made from New Orleans to the river St. Mary's. From this river to the Sabine, and we may add, through Texas, almost every river that enters the gulf, just before its entrance, spreads into a broad lake, communicating with the sea, and the water is partially salt. From one of these lakes to another, there is often a wide natural canal, with from four to six feet water. Those on the shores of Florida, are too numerous to mention with particularity. Perdido bay, dividing Alabama from Florida, is thirty miles long, and from two to six broad. Pensacola bay is thirty miles long, and from four to seven wide.

It receives the rivers Escambia, Yellow, Cold Water, Black Water, and Cedar creek. The bay of Pensacola affords the best harbor on the whole gulf shore. Bayou Texas enters from the north, a mile above Pensacola, and is four miles long, and a fourth of a mile wide. Bayou Mulatto enters the east side of Escambia bay. St. Rosa Sound connects the bays of Pensacola and Chactawhatchee. This is a charming sheet of water, forty miles long, and from one and a half to two miles wide. A narrow peninsula divides Pensacola bay from this sound, for thirty miles. It yields five feet water in its whole length. Chactawhatchee bay is forty miles long, and from seven to fifteen wide. It receives a number of creeks, is much affected by storms, and was formerly the seat of a profitable fishery. St. Andrews' bay is protected by a number of small islands, receives some navigable creeks, has deep water, is twelve miles long, and five miles wide. St. Joseph's bay is twenty miles long, and seven miles wide. Appalachicola is twelve miles long, and from four to six miles wide. Ocklockney is twelve miles long, and two broad. Appalachy bay is a circular indentation, in which is the port of St. Marks, the nearest point to Tallahassee, the seat of government. Hlistahatchee offers a safe harbor for small vessels. Vacassa bay is the eastern-most bay in West Florida.

Rivers. The rivers that have courses of considerable length, rise in the highlands of Georgia, Alabama, and Mississippi. St. Marys is a very considerable stream, that falls into the Atlantic, by a broad mouth. It is for a long way the separating line between Florida and Georgia.

St. Johns, a very considerable river, rises in the centre of the peninsula, and flowing with a gentle current northwardly, broadens to a wide channel, and passes through several lakes, the largest of which is St. George, twenty miles long, and twelve broad, and falls into the sea forty miles south of St. George. It has been navigated by the steam boat George Washington, the first that ever floated on the waters of Florida. She took the inland passage from Savannah, and arrived at Jacksonville, on the St. Johns, in thirty four hours. Indian river has a course from north to south, and empties into the gulf. Most of the rivers that fall into the gulf have their sources in Georgia. The most important of these is Appalachicola, which divides East from West Florida. It is formed by the junction of two considerable rivers, that rise in the subsiding Appalachian ridges in Georgia, the Flint and the Chattahoochy. It is the longest, largest, and most important river in Florida, and falls into Appalachy bay. The small river St. Marks empties into the same bay. Escambia is a considerable river, and empties into Pensacola bay. Perdido, which forms the boundary between Florida and Alabama, falls into the gulf four leagues west of Pensacola bay. There are, also, the Nassau, St. Nicholas,

Ocklocknoy, Corelia, St. Pedro, Charlotte, Hillsborough, Suwaney, Vilchees, Conecuh, Alaqua, Chactawhatchee, Econfina, Oscilla, Achee-nahatchee, Chat-hatchee, Histahatchee, and various others, which rise in Florida, and at different points, fall into the gulf. There are a great number of rivers not here enumerated, that rise in the pine forests, have considerable courses, and fall into arms and inlets of the gulf. The country is as yet scarcely susceptible of accurate topographical information, and is so intersected with rivers, and accommodated with inlets, and the soil is so level, and the communications from one point to another by water so easy, that there is no place in the territory at any considerable distance from water communication. The entrances to most of the rivers have a bar, that unfits them for the navigation of vessels drawing much water. Most of these rivers are susceptible of considerable extent of schooner navigation, and they are generally capable of steam boat navigation.

Islands. The sea islands on the Florida shore are not of much importance. St. Rosa island is a long and narrow slip, parallel to the coast, between St. Rosa bay and Pensacola. The Tortugas are a group of islands, opposite the southern-most point of East Florida. They are covered with mangrove bushes, and extend from north-east to south-west. Anastasia is opposite to St. Augustine, and divided from the main land by a narrow channel, and is twenty-five miles in length. They are covered with pine trees and sand banks, and have a sterile soil. On the West Florida shore are Hummoch, Crooked, St. Vincent's, St. George's, Dog, and James' islands.

Curiosities. These consist in a great many natural caverns, sinking rivers, great springs, and natural bridges. Among the caverns, the most remarkable are Arch Cave and Ladies Cave. The first descends under a vast lime stone rock. At a considerable depth in the earth, a cavern opens, one hundred feet wide, and fifty feet high. From this, leads off a kind of gothic arch, for a long distance, at the end of which is a running stream, twenty feet wide, and five feet deep. Beyond this, is a hall one hundred feet long, with columns and stalactites. This cave has been explored four hundred yards. It abounds in sparry crystallizations. The Ladies Cave is still more spacious. This, too, has its galleries, chambers, domes, sparry columns, and its cold and deep river, winding through its dark passages. Two miles from this cave, is the natural bridge over Chapola river. The Econfina river passes under a natural bridge. The antiquities of West Florida, as great roads, causeways, forts, and other indications of former habitancy, are striking and inexplicable curiosities. None are more so than the regular and noble plantations and avenues of live oaks.

In the vicinity of Tallahassee, a small pond was recently formed by the sinking of the earth, which fell, with all its trees, with a tremendous crash. The sink is perpendicular, and fifty feet deep before we arrive at the water, the depth of which is not ascertained.

Fountains, Lakes, and Springs. There seems to be, over all this country, a substratum of soft stones at equal depths, which is cavernous, and admits numberless subterranean brooks and streams to have their courses far under the ground. In places they burst out in the form of those vast boiling springs, which form rivers at a short distance from their outlets, and by their frequency, their singular forms, the transparency of their waters, and the multitude of their fishes, constitute one of the most striking curiosities of the country. Among an hundred which might be named, and which have created the vulgar impression that there is every where a prodigious cavern beneath the surface of the whole country, the most remarkable is that, twelve miles from Tallahassee, which is the source of Wakulla river. It is of a size to be boatable immediately below the fountain. A mile below its source, the channel becomes so impeded with flags, rushes, and river weeds, that a boat can scarcely be propelled through them. Suddenly this immense spring breaks upon the eye, of a circular form, and in extent like a little lake. The water is almost as pellucid as air. It has been sounded with a line of two hundred and fifty fathoms, before bottom was found. From its almost unfathomable depth, from the aerial transparency of its waters, and perhaps, also, from the admixture of sulphuret of lime, which it holds in solution, it has a cerulean tinge, like that which every voyager has admired in the waters of the gulf. To a person placed in a skiff, in the centre of this splendid fountain basin, the appearance of the mild azure vault above, and the transparent depth below, on which the floating clouds and the blue concave above are painted and repeated with an indescribable softness, create a kind of pleasing dizziness, and a novel train of sensations, among which the most distinguishable is a feeling as if suspended between two firmaments. The impression only ceases, when the boat approaches the edge of the basin near enough to enable you to perceive the outlines of the neighboring trees pictured on the margin of the basin. It has been asserted, that lime stone water, in its utmost purity, has less refractive powers for light than free stone water. The water, probably from the presence of the sulphuret of lime, is slightly rauseous to the taste. Beautiful hammock lands rise from the northern acclivity of this basin. It was the site of the English factory in former days. Here resided the famous Ambrister. The force which throws up this vast mass of waters from its subterranean fountains, may be imagined, when we see this pellucid water swelling up from the depths

as though it were a cauldron of boiling water. It is twelve miles from St. Marks, and twenty from the ocean. Mickasucke lake, fifteen miles north-east from Tallahassee, is twelve miles long. On its shores, many of the old Indian fields are covered with peach trees. Lake Jackson, north-west from Tallahassee, is eight miles long, and three broad. The richest lands in the country are on its borders. Lake Jamony, fourteen miles north of Tallahassee, is eight miles long, and three broad. It is noted for the abundance of its fish. Old Tallahassee lake is near the seat of government. Chefixico's old town was on its south shore. Inundation lake is newly formed by the inundation of the Chapola. Though deep; the forests are still standing in it, and it is twenty miles long, and seven broad.

The Big Spring of Chapola throws out a considerable river from between the high rocks on its shores. The Chapola river is almost wholly formed from large springs. The Big Spring of Chactawhatchee is the chief source of that river. The Waucissa spring discharges a very considerable stream.

Savages. The Seminoles were once a numerous and powerful tribe, as were also the Baton Rouges, or Red Sticks. Their numbers were much reduced by the terrible, but deserved chastisement which they received during the late war. Numerous small tribes, and divisions of tribes, and congregated bodies of refugees, from different foreign tribes, are dispersed in the forests and savannas of this country. They used to find, in the spontaneous production of the soil, and in the abundance of fish and game, a superfluity of subsistence.

The Indians of this region are an alert, active, and athletic people; fond of war; of gay, volatile, and jeyous dispositions, and the merriest of savages. They have the common propensity for intoxication and gambling. They are active and expert hunters; and by the sale of bear, deer, panther, and wolf skins, horses and cattle, bees wax, honey, venison, and such articles generally as are the fruit of the chase, they procure their clothing, and such things as are called for by their habits of life.

Civil Divisions. Since the cession of this country to the United States, the immigration to the country has been very considerable. The country has been divided into counties, judicial and military districts; and all the benefits of American institutions are peaceably diffused over its whole surface. The present number of inhabitants in both Floridas is 34,725. They are as thoroughly mixed as any community in the United States, comprising omigrants from all foreign countries, and from every American state; and among the creoles, there are all possible admixtures of African and Indian blood. The greater proportion of the inhabitants

are very poor, and too great a part of the recent immigrants are merely adventurers. The greater number of the ancient inhabitants lead a kind of pastoral life, and subsist by rearing cattle. A few of the planters are opulent, and have good houses with piazzas, and every addition that can easily be devised to court the breeze. They live a solitary life, in remote forests or savannas. But abounding in fish, cattle, and game, they have all the necessities of life without labor or difficulty; and the unbounded hospitality which they practise, is at once an easy and delightful virtue. Nothing can be more grateful to the summer traveller, oppressed with hunger, thirst, and heat, and wearied with the sad uniformity of the wide pine forests and savannas, than the cordial, though rude welcome, the patriarchal simplicity, the frank hospitality, and the surrender of time, slaves, and every thing that the house affords, to his comfort, than he receives here. Some portions of this region have interest with the thinking traveller from another circumstance. The many mounds, that are memorials of ages and races forever lost to tradition and history, are here mixed with the melancholy ruins of considerable villages, that rise among the orange groves, and manifest that there was once, even here, a numerous population of civilized beings.

The amusements of the people are a compound of Spanish, French, and American manners.

Comparative advantages of immigration to Florida. This country was, in some points of view, an invaluable acquisition to the United States. It was necessary to the rounding and completing the area of our surface, that no foreign power should possess a territory surrounded by our own. It was necessary for the possession of its harbors, and its immense line of coast. It was invaluable for its inexhaustible supplies of ship timber. As an agricultural country, it must be confessed, a great part of it is sterile. The level pine forest lands will bring one or two crops of corn without manure; and will probably be cultivated, to a certain extent, with indigo. The drier lands of this sort are admirable for sweet potatoes, and on the whole, better, with the requisite cultivation and manuring, for gardens, than soils naturally more fertile. There are considerable bodies of excellent land distributed at wide intervals over all the country. But a small proportion of these are what are denominated first rate. Some parts, probably, offer equal advantages for the cultivation of sugar, with the sugar lands of Louisiana. Cochineal, it is supposed, will be made to advantage, and it may be, coffee. It offers superior maritime advantages of every sort; abounds in the materials of ship building; and in its rich and inexhaustible fisheries, and its supply of oysters and sea fowl, has its own peculiar advantages. The immigrant who sought to enrich himself by cultivation alone, would probably

make his way to the richer soils west of the Mississippi. But, if taken as a whole, it is more sterile than the country along the Mississippi; it feels the refreshing coolness of the sea breeze and the trade winds, and it is, beyond a doubt, more healthy. Nature has her own way of balancing advantages and disadvantages, over the globe; and a Florida planter finds sufficient reasons, on comparing his country with others, to be satisfied with his lot.

Chief Towns. St. Augustine is the chief town of East Florida, and the most populous in the country. It is situated on the Atlantic coast, thirty miles below the mouth of St. Johns, about two miles within the bar opposite the inlet, and at the neck of a peninsula, in north latitude $29^{\circ} 45'$. The bars at the entrance of the inlet have from eight to ten feet water. The town is built of an oblong form, divided by four streets that cut each other at right angles, fortified by bastions, and surrounded by a ditch, and is defended by a castle called Fort St. John. The river St. Marks flows through the harbor, and divides the town from the island. The streets are generally so narrow as scarcely to permit two carriages to pass each other. To balance this inconvenience, the houses have a terrace foundation, which, being shaded, renders walking in the sultry days agreeable. The houses are generally built of a free stone peculiar to the country. This rock is obtained from the adjacent island, and is formed of concrete sea shells. The external walls are plastered, and have a handsome and durable appearance. They are not more than two stories high, with thick walls, spacious entries, large doors, windows, and balconies, and commonly a large and beautiful garden attached to them.

On entering this ancient looking town from the sea, the castle of Fort St. Mark has an imposing effect upon the eye. It is a fort forty feet high, and in the modern style of military architecture. It commands the entrance of the harbor, and is of a regular quadrangular form, with four bastions, a wide ditch, and sixty heavy cannon, and is capable of containing one thousand men. It is on a point of land between the conflux of Matanzas creek and St. Sebastian's, and forms a landscape of great picturesque beauty, with its interspersed groves of orange trees, and flower and kitchen gardens. Although the soil about St. Augustine is so sandy as to give it the appearance of being sterile, yet it is far from being unproductive. It brings two crops of maize in a year; and garden vegetables grow in great perfection. The orange and lemon grow as if they were indigenous, of a greater size, it is affirmed, than in Spain or Portugal. One tree has been found to produce four thousand oranges. The harbor would be one of the best, were it not for the bar at its entrance, which prevents the approach of large vessels. There is a light house on

the island, and some gardens, and orange and date trees. From this island are taken the stones of which the town is built, and here commences the northern limit of that remarkable quarry of stone that skirts the southern shore of Florida. The population of St. Augustine now consists of between four and five thousand inhabitants. Near this town grows the palm or date tree. Its branches attract notice from their singular beauty and constant rustling, like aspen leaves, as well as the peculiarity of the under branches, which serve for ladders by which to ascend the tree. The fruit, in form, resembles the largest acorn, and is covered with a thin, transparent, yellowish membrane, containing a soft saccharine pulp, of a somewhat vinous flavor, in which is enclosed an oblong, hard kernel. When ripe, it affords an agreeable nourishment. The olive has already become naturalized to the soil. Some have asserted, that cocoa trees would succeed in the southern parts of the peninsula.

Pensacola, fifty miles from Mobile, is the capital of West Florida. It is situated on a bay of the same name, in north latitude $33^{\circ} 32'$, and in longitude $10^{\circ} 18'$ from Washington. The shore is low and sandy; but the town is built on a gentle ascent. It is, like St. Augustine, built in an oblong form, and is nearly a mile in length. Small vessels only, can come quite to the town. But the bay affords one of the most safe and capacious harbors in all the gulf of Mexico. It has been selected by our government, as a naval station and depot, for which its harbor, and the advantage of fine ship timber in the neighborhood, and its relative position, admirably fit it. A stream of fresh water runs through the town, and its market is well supplied with beef, garden vegetables, and fish. Oysters, turtles, and gophers are important items in the supplies of food, and especially sea fowls. It was an old and decaying town when it came under the American government. At that period it received that impulse of increase and prosperity, which has uniformly been the result of coming under the American government. A number of new and handsome brick houses were built. Numerous adventurers flocked to the place, drawn thither by its natural advantages and its reputation for uncommon salubrity. In the fatal autumn of 1822, the yellow fever visited this place in common with many other towns on the gulf. Extreme negligence in the police of the town, is supposed to have caused it. Confidence in its fancied exemption from that terrible malady was destroyed, and it again declined. It is, unquestionably, a salubrious position, and it is believed that its natural advantages, added to those which result from its being a naval position, will restore its proper degree of estimation and importance. Its supplies are now in a considerable degree from New Orleans. Of course, it is a place something more expensive than that city. One of its inconveniences is a very sandy position; and the inhabitants are said

to acquire a general gait, as if continually walking in a sand that gave way under their feet. At present, it contains a very respectable society, though the aspect of the town is rather unpleasant. It contains nearly three thousand inhabitants.

St. Marks is an inconsiderable sea port, nine miles from Tallahassee, and is the nearest navigable point to that place.

Tallahassee has been selected as the seat of government for the territory of Florida. The reasons which determined the governor and commissioners to fix on this place as the metropolis, were its central position, fertility of soil, and the reputation it had acquired among the Spanish and Indians, of being uncommonly salubrious. The position was fixed upon for the seat of government in 1824. It was divided into lots, and sold in 1825. Five squares have been reserved for the purpose of public buildings. The precincts of the town encircle a beautiful undulating country. It was immediately incorporated as a city. In two years from the first building, the number of whites and blacks were supposed to amount to 800. Some respectable houses were built, but the principal part of the habitations are temporary log buildings. The forest is falling on all sides, and it is daily acquiring more and more the appearance of a town. The amount of the sales of the lots was 24,000 dollars. That sum was appropriated for the erection of a territorial capitol. The materials for building are good and abundant. There are already a number of stores, taverns, and shops of all the customary mechanics, with a full proportion of lawyers and doctors, and 200 houses. A printing press has been established, from which issues the 'Florida Intelligencer.' The Florida mahogany that grows in the vicinity, is scarcely inferior to that brought from Honduras. There are fine situations for mill seats in the vicinity, and great scope for industry and enterprise of every sort. Post roads have been opened to Georgia, St. Marks, St. Augustine, and Pensacola; and bridges and ferries so established, that travelling is comparatively safe and easy. Immigrants may now arrive at this place from any direction without being obliged to sleep out of a house. In consequence of the sudden influx, articles at first were very high. Yet the neighborhood abounds in game, fish, and water fowl. Venison and wild turkeys are constantly offered for sale by the Indians. Trout and sun fish are taken in the immediate vicinity. At St. Marks, in the neighboring tide waters, sheep's head and other sea fish, and oysters abound. The country around is high and rolling. This place is only three miles north of the elevated chain of rolling hills, which, for a great distance, bound the shores of the Mexican gulf. Thence to the sea, the land is low and level, and abounds in the long leafed pine. There are many lakes not far distant. The most important among them are Bradford's and Jack-

son's. The latter is a clear and beautiful sheet of water, fifteen miles long, and one and a half wide. This lake has risen, within the last year, six or seven feet. It must have had a subterranean outlet, which seems now partially stopped. It was but a small and shallow pond in the time of General Jackson's campaign. The soil about this town is a mixture of loam, sand, and clay. The growth in the dry grounds is oak, hickory, and pine. But wild cherry, gum, ash, dog wood, mahogany, and magnolia abound. The climate, as far as experience goes, is very healthy. The common summer elevation of the mercury is not high. The range is between 88° in summer and 24° in winter. The heat is moderated by a sea breeze. The dews are heavy. Where the soil is sufficiently rich, the climate is adapted to the sugar cane, and it will be a country for the growing of sugar. Vessels come from New Orleans to St. Marks, in three or four days. The remarkable 'big spring' of the river Wakulla; is twelve miles distant.

When the contemplated canal shall have been completed, and the resources of the country developed, few places present more attractions to immigrants. Quincy and Magnolia are thriving villages.

History. The English aver that Florida was discovered in 1497, by Sebastian Cabot. In 1524, the first effectual settlement was made in the country. In 1528, an expedition was undertaken to the country by Pamphilo de Narvaez, with 400 men, from the island of Cuba. He attempted to penetrate the interior of the country, and was never heard of more. In 1538, the country was entirely subdued by Ferdinand de Soto, one of the bravest officers in the Spanish service. But the savages were numerous, fierce, and brave; and it cost the Spanish a long and bloody struggle before they were able to establish themselves in the country. In 1564, the French began to establish themselves, and to form little settlements along the shore, and from the facility with which they have always gained the good will of the savages, they became at once powerful and troublesome to the Spaniards. Their settlements were seldom of an agricultural character. They generally took part with the natives, and addicted themselves to hunting. The Spanish sent a fleet against them, and destroyed their settlements. In 1597, the French made severe reprisals, demolishing all the forts erected by the Spaniards, and murdering all the colonists whom they found in the country. From this time, the French neglected their establishments in this part of the country, and the Spanish continued, from time to time, to make petty establishments here. In 1586, St. Augustine was attacked and pillaged by Sir Francis Drake. In 1665, it was entered and plundered by Captain Davis, at the head of a body of bucaners. In 1702, Colonel More, at the head of 500 English and 700 Indians, marched from Carolina to the

walls of St. Augustine, and laid close siege to it for three months. The Spaniards having sent a squadron to the relief of the garrison, he raised the siege and made a precipitate retreat. When the British established the first colony in Georgia, in 1733, the Spaniards became apprehensive of a new attack upon Florida, and not without reason; for in 1740, an expedition was fitted out against St. Augustine, by Oglethorpe. But the Spanish commander, having received timely notice of the intended attack, made such additions to the strength of the garrison, and used such other artificial defences, as that the English were compelled, after sustaining considerable loss, to abandon the siege. In 1763, Florida was ceded to Great Britain in exchange for Havana. She received Florida as an equivalent for that very important acquisition. By the encouragement which the government gave to agriculture, numbers of colonists poured in from every part of the British islands, and from all the countries in Europe; and this may be considered as the most prosperous period of the country, as regarded its future prospects. In the year 1781, while Great Britain was exerting all her powers to reduce her revolted colonies, a well concerted attack by the Spaniards re-conquered the country, and brought it under its ancient regime, and it was guaranteed to them by the peace of 1783. It remained in their possession, forming one of the three governments which composed the captain-generalship of the island of Cuba. In 1810, the inhabitants of that part of West Florida which now composes part of the states of Alabama and Louisiana, in concert with the American authorities, renounced the government of Spain, and attached themselves to the United States. The revolution was effected without bloodshed. It is said that they hesitated about the propriety of setting up an independent government, and that they sent delegates to our government to treat respecting the terms of reception. The country, so seceding, came peaceably under our government, and has so remained ever since.

We know little of the interior history of this country, while under the Spanish regime. St. Augustine, Pensacola, and St. Marks were the only places of much importance. The country supplied Havana with cattle and horses, and furnished an occasional retreat to the inhabitants of that city during the sickly season. They had the customary Spanish engines of government, a priest, a calaboza, a commandant, and a file of soldiers. History redeems but little from the silence of such a government, as it respects knowledge of the character and deportment of the officers; or the condition of the people. The materials of such annals, if any exist, are in the archives at Havana. Meantime, our government had heavy and well grounded claims on the Spanish government, for spoiliations committed on our commerce. These claims, as also settling definitely the

territorial line of jurisdiction between the United States and New Mexico, made the basis of a treaty, by which the Spanish ceded to us the entire country. The treaty was made a law in 1820; and it then became a territory of the United States, and has since advanced with that steady progress in population and prosperity, which has marked every country that has thus been added to our government.

It is supposed there are seven millions of acres in the coffee region of Florida; eight millions of sugar land; and nine millions of cotton and grain land; making twenty-four million acres of marketable land.

ALABAMA.

LENGTH, 280 miles. **Breadth,** 160 miles; containing 46,000 square miles. Between 30° 12' and 35° N. latitude; and between 8° and 11° 30' W. longitude from Washington. Bounded north by Tennessee; east by Georgia; south by Florida; and west by the state of Mississippi.

CIVIL DIVISIONS.

Counties. Autauga, Baldwin, Blount, Bibb, Butler, Clarke, Conecuh, Covington, Dallas, Decatur, Franklin, Fayette, Greene, Henry, Jackson, Jefferson, Lauderdale, Lawrence, Limestone, Lowndes, Madison, Marengo, Marion, Mobile, Monroe, Morgan, Montgomery, Perry, Pickens, Pike, Shelby, St. Clair, Tuscaloosa, Washington, Wilcox, and Walker.

Population. No part of the western country has had a more rapid increase of population than this state. In 1800, that portion of Mississippi Territory which is now Alabama, had only 2,000 inhabitants. In 1810, it contained 10,000. In 1820, it numbered 127,000. By the census of 1830, 199,221 free whites, and 112,625 slaves. Total, 311,846.

This state rises by regular belts or terraces from the gulf of Mexico. The lower belt is low, level, and has many swamps and savannas, and the prevailing timber is pine. The northern belt is pleasantly undulating. Tennessee valley, though a deep alluvial country, is in fact high table land, and there are few table countries which excel this part of the state in fertility, mildness of climate, and pleasantness of position. This valley is separated from that of the Alabama by hills of such lofty and precipitous character, as generally to merit the name of mountains. Some of these peaks tower three thousand feet above the level of the gulf. One chain runs from Ross, on Tennessee river, between the Coosa and Black Warrior, giving rise to the head waters of Cahawba. Another separates the streams of the gulf from those that fall into the Tennessee. Another range divides between the waters of the Black Warrior and Tombigbee.

Rivers. The Chatahochy separates this state from Georgia, and not far below the limits of that state, unites with Flint river to form the Apalachicola of Florida. The Tennessee curves from the north-east to the north-west corner of the state, near its northern line. A line of hills, with a curve corresponding with that of the Tennessee, runs at a distance of between fifty and eighty miles from that river, giving rise to numerous streams that flow from one declivity north to the Tennessee, and from the other south, to the waters of the Alabama and Tombigbee. Into Tennessee flow Watts' river, Turkey creek, Poplar creek, Occochapa, and many smaller streams. These rivers reach the Tennessee either at the Muscle Shoals, or near them. It is proposed to unite the waters of the Tennessee with the upper waters of the Tombigbee by a canal, which shall cross Bear creek, of the Tennessee, and the line of hills that separates the waters of that river from those of Tombigbee, and unite the canal with an upper and boatable branch of that river.

Mobile river is formed by the junction of Alabama and Tombigbee, and is so called up to the point where these rivers unite at Fort Mimms. It enters Mobile bay by two mouths. The Alabama is the eastern branch of the Mobile, and is itself formed from the junction of the Coosa and Tallapoosa rivers. The Tallapoosa rises in the Alleghany ridges in Georgia, where it is called Ocafusky, and receives a number of tributaries in the Indian country. It passes over considerable falls before it gives its waters to the Alabama. The Tallapoosa rises in the same ridges, and pursues a somewhat longer course to the south-west. Both are rapid streams, run through the Creek country, and are not boatable to any considerable distance above their junction. From this junction the Alabama receives a number of small streams from the east, bends towards the west and receives the Cahawba. It is navigable by sea vessels to Fort Claiborne. It is one of the finest rivers of the southern country, and navigable for steam boats of the largest class for a great distance. A number ply constantly on it. They transport 130,000 bales of cotton to Mobile. When the title of the lands of the Creek Indians shall have become vested in the United States, and the beautiful country on the head waters of this river settled by whites, it is probable that Montgomery, situated midway between Mobile and the highest points of steam navigation on this river, will become one of the most important towns in the state. The Tombigbee rises in the ridges that separate between its waters and those of the Tennessee, in the northern parts of the state; and receives some of its western branches from a range that diverges from the Tennessee hills, and runs south along the middle of the state of Mississippi. It receives, in its progress, many considerable streams from the state of Mississippi on the west. It meanders through the Indian

country, and a tract purchased by French immigrants. Eighty miles above St. Stephen's, it is swelled by the accession of the Black Warrior, to which place small sea vessels ascend. In moderate stages of the water, it affords steam boat navigation to Tuscaloosa. Both these rivers are extremely favorable to boat navigation; and during the higher stages of water, a number of steam boats are constantly moving through the dark forests and rich alluvions of these fine rivers. Yellow, Chaetaw, and Pea rivers rise in this state and pass into Florida, as does also the Conecuh, a considerable river that rises in the interior and finds its way to the sea through that country. The Tensa is a branch or enlargement of Mobile river, before it enters Mobile bay. The Perdido separates this state from Florida, as the Pascagoula on the west does from the state of Mississippi. Escambia rises near Fort Claiborne, and running a southwardly course, unites with the Conecuh, and forms Escambia bay above Pensacola.

Face of the Country, Soil, &c. The following was considered by the purchasing immigrants, a very accurate and faithful general delineation of the qualities of the soil. It is chiefly extracted from the published accounts of the United States' surveyor in that district; and has the advantage of having been the result of actual inspection. The general shape of the state is that of a well defined parallelogram. The only undefined line is the southern one. From this line another parallelogram is formed, extending between Florida and the state of Mississippi. It includes Mobile bay. This was once part of West Florida, and was necessary to this state, to enable it to communicate with the gulf of Mexico. Except the alluvions on Mobile river, the soil is generally a pine barren. In Mobile bay are the islands Dauphin, Massacre, and Petit Bois. Mobile bay is a deep and commodious entrance into the interior. Dauphin island is of a triangular shape, and five miles in length. The ship channel is between Dauphin island and Mobile point. There is another pass, called Pass au Heron, which has but six feet water over its bar. Taking the state as a whole, the northern parts, near Tennessee, are generally hilly and precipitous. At the northern commencement of this belt, it is mountainous, and a continuation of the Alleghany hills. The central interior region is generally waving hills. As we approach within fifty or sixty miles of Florida, the swamps are for the most part timbered with cypress and gum trees, and some loblolly pines; and the uplands with long leaved pine. These pine swells and levels have a very thin soil; but generally having a substratum of clay, contain within themselves a principle of fertility, which, when cultivation shall be advanced and population sufficiently compact, will not fail to be called forth. At present they bear, without manuring, two or three crops of maize, and perhaps one or two of small cotton. But in the present order

of things, while there are sufficient extents of rich lands, the pine barrens will be held in little estimation; and they probably include more than one half the surface of the state. Among the pine woods, grows rank grass, furnishing fine and inexhaustible summer range. The alluvions on the Alabama and Tombigbee are generally wide, and for the most part, first rate lands. Some affirm that they are equal to the lands on the Mississippi. When these lands came into the market in the land office, the rash and grasping spirit of land speculation raised them to an inordinate price, which proved, in many instances, ruinous to the purchasers. In some cases, these lands, in a state of nature, sold as high as fifty dollars an acre. The alluvial soils on the margins of the streams, generally are fertile and productive. The hammock lands rank at the head of the second rate lands, and their fertility is of long duration. They constitute an intermediate belt between the bottoms and pine ridges. They generally have a slope like a glacis. In the first rate lands, no pines are to be seen. In second rate lands, pines are intermixed with dog wood, hickory, and oak. Wherever the high table grounds are seen covered with oaks, dog wood trees, and the pawpaw intermixed, the soil is sure to be fine. The French immigrants are sanguine in the belief that the slopes and hammocks of this state would afford eligible soils and situations for vineyards. It will be an omen for good for the country in general, and for this state in particular, if they prosper in attempting to rear the vine and the olive. Experience has abundantly demonstrated that the great bulk of American farmers are little disposed to speculative agriculture. They prefer to fix their attention upon corn, cotton, tobacco, beef, and pork. Along the southern limits of the state, the soil is thin, and the unvarying verdure of the pine, tires by its uniformity. On the head waters of the Escambia and Conecuh, the soil and climate are favorable to the sugar cane; and here are seen those groves of orange trees of which travellers have spoken with so much delight, affirming them to be indigenous. They were, beyond question, the growth of seeds scattered from orange groves originally cultivated by Spaniards in Florida.

In the lower parts of the state, as we approach Florida, the swamps become more and more extensive. Cypress lands are abundant. On the alluvial grounds which are not inundated, is large and rank cane. Below the Tombigbee, the river is apt to inundate the bottoms and swamps, and the mosquitos are excessively annoying. As we ascend into the central parts of the state, the lands become high and broken, and pine is less frequent. Oak, hickory, and poplar are there the prevailing growth.

The most extensive bodies of good land, and those which are at present

most populous, are between the Alabama and Tombigbee, the bottoms of the Tallapoosa and the Black Warrior. Passing over the ridge that separates the waters of the Conecuh from those of the Alabama, there is an extensive body of rich land. On the head waters of Lime Stone creek, there is also a fine body of land. A considerable distance above the junction of the Coosa and Tallapoosa, there is a country of fine swells of land, watered with frequent springs of pure water. The land is heavily timbered with those kinds of trees that indicate a rich soil. It is inhabited by the Creek Indians.

Character of the Population. This state was originally a part of the Mississippi territory. It has acquired population with great rapidity, and already far exceeds in numbers the state from which it was taken. Few states have had so great an increase. This was owing in part to its contiguity to Georgia, and its proximity to the Carolinas; and its having fresh and fertile lands, and yet being in other respects, as regards soil, climate, and situation, very similar to those states. Immigrants from the land of pine and cypress forests, love to see these trees in the new regions to which they transplant themselves. Public opinion had estimated this country as more than commonly healthy for its climate. That part of it lying south of the Tennessee ridge, has great facilities of communication with the sea. The southern planters ordinarily do not covet a country which admits a very dense population. They love space in which to move themselves. They prefer those extensive pine barrens in which there is such inexhaustible range for cattle, and which will not, for a long time, admit a dense population. At the same time, they desire at intervals, rich alluvial soils of thick cane brake, the proper soil for cotton. Alabama furnished them, in these respects, all they could wish. It was much healthier than the maritime parts of the Carolinas; and at the same time, had a soil better adapted to cotton. This may account for the great immigration from the Carolinas and Georgia, and for that surprising increase in the population, which we have already noted in the table of civil divisions.

The people in this state have a general character for order, quietness, a regard for religion, schools, and social and moral institutions, more decided than could have been expected, taking into view the recent origin of the state. They speak and think of themselves, in reference to the states further south and west, with no small degree of assumption in the comparison. There are many opulent planters, with large numbers of slaves; and they possess the characteristic hospitality of these people every where. They have not formed a character as a state. They have few religious, literary, or other institutions. But they are developing a character which will lead to respectable and numerous

foundations of this kind. Travellers have been favorably impressed with the characteristics of hospitality, quietness, and good order, which they generally witnessed. The people begin to be alive to the vital interests of schools and education. The usual appropriations of lands for colleges and schools, have been made by congress for this state. From the comparatively high price of lands, these appropriations must ultimately constitute a respectable fund.

Seminaries. Alabama contains three colleges: the Catholic college near Mobile, the Methodist college at Lagrange, a respectable institution, and Alabama college at Tuscaloosa. This last is an amply endowed institution. One of the buildings is magnificent. Great exertions have been made to purchase a respectable library and philosophical apparatus, and in point of professorships and other appointments, to place it on a footing with the most respectable institutions of the kind.

Climate. The climate of this state, taken together, is favorable to health, compared with the southern country generally in the same parallels. The lower part of it is constantly fanned, during the summer heats, by the trade wind breezes. There can hardly be said to be such a season as winter, and yet the summers are not hotter than they are many degrees more to the north. The duration of the summer heats is indeed debilitating, and the direct rays of the summer's sun, oppressive. But strangers from the north, in the shade and in the current of air, seldom suffer from the heat. In the northern parts of the state, still waters often freeze. In the southern parts, they seldom see much snow or ice. Cattle require no shelter during the winter. Maize is planted early in March.

In the 31st degree of latitude, the thermometer stands in spring water at 69°, which is nearly the mean temperature of the year. A series of thermometrical operations for a year, give the following result. The warmest part of the warmest day in April gave 82°. Mean heat of July of the same year, 86°. Coldest day in January, 54°. Coldest day in February, 43°. Warmest day in March, 85°. Same year the trees in the swamps, where vegetation is most tardy, were in full leaf the 2d of April; peach blossoms gone. April 12th, peas in pod; peaches of the size of a hazelnut; fig trees in leaf. Green peas at table May 2d; strawberries ripe. May 16th, mulberries, dewberries, and whortleberries ripe. May 15th, cucumbers in perfection. June 29th, roasting corn at table.

Diseases. In point of health, this climate takes its character from situation and local circumstances. The prevailing diseases of the cooler months are those of the class termed cachexy. The diseases of the warm months are generally bilious. Where the powerful southern sun brings the swamp miasm into action, diseases follow of course, and none but negroes, and those acclimated, can safely reside in the low grounds on

the banks of the rivers, and near the inundated swamps. The yellow fever has seldom been seen, except in Mobile. In the high land regions, far from swamps, creeks, and stagnant waters, in the districts of hills, springs, and pine forests, the country may be pronounced salubrious, and the planters from the sickly country generally retire to such places to spend the summer.

Employment of the People. Cotton is the grand staple of Alabama. The growing of this article has increased in this state in a ratio even greater than that of the population. Among the cotton raising states, this now takes a very high rank. Sugar, rice, and tobacco are also cultivated. Many of the people about Mobile are shepherds, and have droves of cattle, numbering from 500 to 1,000. Swine are raised with great ease, where they can be guarded from their enemies, wolves, panthers, and alligators. The small breed of Indian horses, or Spanish tackies, as they are called, are ugly, but hardy and strong, and are better than the handsomer horses for service. The country trade of the lower part of Alabama is to Mobile, Blakely, and Pensacola. Considerable amounts of pitch, tar, turpentine, and lumber are exported. The cotton used to be carried to New Orleans. Mobile has become a port of great export for cotton. This country, so near Havana, has great advantages for navigation. Sea vessels proceed up the Alabama to a considerable distance. The northern parts of Alabama, situated in the Tennessee valley, are compelled to send their produce by a very circuitous route, down the Tennessee, the Ohio, and the Mississippi, where it arrives after a passage of 1,600 miles. At starting, it cannot be more than five hundred miles from the gulf. There is little hazard in asserting that the intelligent and opulent people in the beautiful and fertile valley of the Tennessee, will canal the ridges that rise between them and the waters of the Alabama, and will unite themselves with the gulf by that fine river.

Chief Towns. Mobile is the only town of any great importance in the lower part of the state. It lies on the west side of Mobile bay, on an elevated plain, in latitude $30^{\circ} 40'$. It is situated considerably above the overflow of the river, in a dry and pleasant situation. Access to it is rendered somewhat difficult to vessels by a swampy island opposite the town. But when once they have entered, they are perfectly secure from winds, storms, and enemies, and can come directly to the town. It has swampy lands and stagnant waters back of it, and near it a sterile country of pine woods. From these causes, though it had been one of the earliest settled towns in the country, it never became, under the Spanish and French regime, more than a military post. Under the government of the United States, it has received a new impulse of pros-

perity. But a few years since, little cotton was raised in the whole country connected with Mobile, and none was exported directly from this place. It is now a great shipping port for cotton, and a large number of square rigged vessels take their freight from this city. There is no other port, perhaps, in the United States, of the same size, that has so large an amount of export. After New Orleans and Charleston, it is the largest cotton port in the country. It is enlivened, too, by the coming and departing of many steam boats that ply on the noble river above the city. In addition to the great number of packet schooners that sail between this place and New Orleans, some by the lake, and some by the Mississippi, there is now a steam boat communication between the two cities, by the way of lake Ponchartrain. Of course, except during the sickly months, it is a place of great activity and business. Chiefly destroyed not long since by a destructive fire, it has been rapidly and handsomely rebuilt of brick. It contains 2,000 free whites, and 1,500 slaves and free blacks: total, 3,500. The public buildings are a court house and a jail, four churches, one for Roman Catholics, one for Episcopalians, one for Presbyterians, and one for Methodists. A Roman Catholic college is erecting at Spring Hill, six miles from the city. It exported, 1831, 110,000 bags of cotton. It has the disadvantage of a shallow harbor, which is moreover growing shallower by the sand deposited by the rivers. The most fatal impediment to the advancement of this town, is its acknowledged character for sickness. Advantage has been taken of this circumstance, to commence the town of Blakely, on the eastern and opposite side of the bay, and at ten miles distance. The site is free from contiguous swamps. It stands on the Tensa, the largest branch of the Mobile, which yields deeper water, and has a harbor of easier access than Mobile. The situation is open, high, and dry, and it has cool and limpid springs of water, and superior advantages of communication with the country by good roads. It has improved considerably, and its founders were sanguine that it would speedily eclipse Mobile. But that ancient town had, what is called in the west country phrase, 'the start,' and sustains its pre-eminence as a commercial depot, notwithstanding its frequent and destructive ravages from yellow fever and fires. Mobile is 1,033 miles from Washington, and 226 S. from Tuscaloosa.

St. Stephens is on the Tombigbee, 120 miles from Mobile, and at the head of schooner navigation. It is a considerable village, with stone houses; but notwithstanding a favorable position in the midst of a fine country, wears the aspect of decay.

Cahawba has been, until recently, the political metropolis, and is situated at the junction of the Cahawba with the Alabama. County courts are held here, and an office for the sale of public lands. The circum-

stance of its having been the metropolis, gave it a rapid growth. It has a considerable number of handsome buildings, intermixed, according to the common fashion of new towns, with a great many temporary log buildings. Florida, Claiborne, Dumbries, Jackson, Coffeeville, Demopolis, and Columbia are incipient, and some of them, thriving villages.

Tuscaloosa, at the falls of the Black Warrior, is permanently fixed as the political metropolis, and is a town of rapid growth. Its situation, 500 miles from Mobile, is elevated, level, and beautiful. It contains 2,000 inhabitants. Many of the buildings are of brick, and handsome. The public buildings are a superb state house, a court house and jail, four churches, one for Presbyterians, one for Episcopalians, one for Baptists, and one for Methodists. This town is the seat of the new and handsome buildings of Alabama college. Beautiful stone for buildings is found in the vicinity, and mineral coal of the best quality abounds in the banks of the Black Warrior. Salt works from water recently discovered are in successful operation. Tuscaloosa is 858 miles from Washington.

Montgomery, the shire town of the county of that name, is pleasantly situated on the west bank of the Alabama, opposite the Big Bend, 200 miles east of Mobile, and the same distance west of Milledgeville in Georgia. The public buildings are a court house and jail, one church for Presbyterians, and one for Methodists, and a theatre. It contains 800 inhabitants. It is surrounded by a fertile soil, rapidly settling with rich planters, chiefly from the Carolinas and Georgia, and promises to become a place of much commercial importance. Washington, Selma, and Claiborne, and other towns on the Alabama, are inconsiderable villages. Thirty miles higher, on the same river, is Kelleysville, a thriving village. Eagleville is principally inhabited by French emigrants, who calculated to cultivate the olive and the vine. Montgomery is 859 miles from Washington, and 119 from Tuscaloosa.

The beautiful and fertile valley of the Tennessee has a very different conformation, as the river communicates by a long and circuitous route with the Mississippi and New Orleans. This valley has a number of large and flourishing villages of its own. The largest of these is Huntsville, a handsome and thriving town, situated ten or fifteen miles north of the Tennessee, and fifty from the Muscle Shoals. The country about it is extremely fertile. It is principally built of brick, with some spacious and very handsome buildings, a Presbyterian church, a Baptist and two Methodist places of worship, a handsome court house; and other public buildings. One of those large and beautiful springs that are so common in this region, furnishes the town with water by machinery put in motion by its own current.

Florence is the next town in point of size, and in a commercial view,

more important than the other. It is situated on the north side of the Tennessee, at the foot of the Muscle Shoals. When the river is in a good stage of water, steam boats of the largest size can come up to this place. It has in this way a great and increasing intercourse with New Orleans. It has about 1,400 inhabitants, a very handsome court house, and a hotel in city style. It has also a Presbyterian church.

Tuscumbia is the next place in size and importance. It is situated on the south side of the river near a mile from its banks, and five miles from Florence. It has several handsome buildings, and 1,000 inhabitants. Russellville is also a new town of some importance.

A considerable degree of munificence has been manifested by the people of this state in their appropriations for schools, roads, bridges, canals, and other works of public utility. An appropriation of 5 per cent. of the net proceeds of all the public lands in the state has been provided for these objects. A rail road has been commenced at Tuscumbia, which is intended to connect with some point of the Tennessee above Muscle Shoals; and a convention recently called to deliberate upon internal improvements expedient for the state, have recommended a rail road or canal communication between the valley of the Tennessee and the navigable waters of North Carolina. General Jackson's military road between lake Ponchartrain and Florence in this state, runs almost in a right line 330 miles. If fully completed and kept in good repair, it would be of the greatest national utility. There are two or three canals in contemplation. There is no point where one seems to be more called for, than between the waters of the Tennessee and Alabama.

County Towns. Washington, Centreville, Bluntsville, Greenville, Clarksville, Sparta, Fayette, Erie, Columbia, Bellfonte, Elkton, Moulton, Athens, Lowndes, Linden, Pikeville, Somerville, Pickensville, Pike, Ashville, Shelbyville, Walker, Washington, Canton.

Constitution and Laws. They have the common features of those of the other states. The legislative body is styled 'the Assembly.' The senators are elected for a triennial, and the representatives for an annual term. The governor serves two years, and is eligible only four years out of six. The judiciary consists of a supreme and circuit court, together with subordinate courts appointed by the legislature. The judges are appointed by the legislature, and hold their offices during good behavior. All persons over twenty-one years and citizens of the United States, are electors.

MISSISSIPPI.

THIS state is not far from 300 miles in average length, and 160 in average breadth. Between 30° and 34° N. latitude; and 11° and 14° W. longitude from Washington. It contains 28,000,000 acres. Bounded on the north by Tennessee; east by Alabama; south by the gulf of Mexico and Louisiana; west by Louisiana and the Mississippi.

CIVIL DIVISIONS.

Names of the Counties. Adams, Natchez, city, Amite, Claiborne, Copiah, Covington, Franklin, Greene, Hancock, Hinds, Jackson, Jefferson, Jones, Lawrence, Lowndes, Madison, Marion, Monroe, Perry, Pike, Rankin, Simpson, Warren, Washington, Wayne, Wilkinson, Yazoo.

Population. Free whites, 42,176. Slaves, 32,814. Total, 74,990.

Face of the Country. There are a number of distinct ranges of hills of moderate elevation in this state, beside a singular succession of eminences that show conspicuously in descending the Mississippi. Some of the bases of these hills are washed by this river. They are the Walnut Hills, Grand Gulf, Natchez, White Cliffs, and Loftus' Heights. In other places they appear near the river, or in the distance, as at Petit Gulf, Villa Gayosa, and Pino Ridge. Two of these ranges divide the state nearly in its whole extent, and separate it into sectional divisions. In advancing from the bottoms of the Mississippi, there is every where, at a greater or less distance from the river, an appearance of bluffs, which, when mounted, spread out into a kind of table surface, waving pleasantly; but in many instances, the richest table lands have precipitous benches, which expose the land to what is technically called by the agriculturalists, 'washing.' This is a misfortune to which the richest lands in this state are most subjected.

Pine Ridge is a singular elevation. It approaches within a mile of the Mississippi, and is a high belt of pine land, like an island, in the

midst of surrounding rich land, timbered with hard woods. We know of no pine so near the Mississippi, except in one place in the county of Cape Girardeau in Missouri, for a distance of 1,700 miles. In the northern section of the state, inhabited by the Cherokees and Chactaws, the land rises into regular and pleasant undulations. The soil is deep, black, and rich, presenting, in a state of nature, the singular appearance of hills covered with high cane brake. From their precipitous character, these fertile and pleasant hills are subject to the general inconvenience of washing. The country inhabited by the Chickasaws, north-west of the Yazoo, is also of a surface charmingly variegated with swells and vallies of great fertility, and abounding in fine springs.

The White Cliffs are just below Catharine's creek. Loftus' Heights are a few miles lower on the river. They are 150 feet high. In the strata of this hill are seen the last stones that are discovered on descending the Mississippi. They are visible only in low stages of water. They are of the class commonly called *breccia*, cemented with pebbles and other matters into a mass, apparently of recent formation. There is probably no state in the union, and few countries in the world, of a more pleasantly diversified surface, more happily distributed into hills and vallies, than the surface of this state.

Rivers. The Mississippi washes the western shore of this state for a distance, following its meanders, of nearly seven hundred miles. The right line of the Mississippi shore is less than half that distance. But the river is here remarkably circuitous, often curving round seven or eight leagues, and almost returning back on its course. The greater part of this long line of river coast, unfortunately, is inundated swamp, very thinly inhabited, except by wood cutters for the steam boats, and seldom seen by any other than people travelling on the river. There is here and there a position so high as to be capable of being occupied as a plantation. But these uncommon elevations soon slope back to the cypress swamps.

The Yazoo is the most considerable river whose course is wholly in this state. It rises in the Chickasaw country, in latitude $34^{\circ} 28'$, near the limits of Tennessee, and its head waters almost communicate with those of Tombigbee. From its source it runs a north-west course, receiving the Busha Yalo, the Tallahatchee, Lappataba, Buffalo creek, and a number of less considerable streams, and by a mouth one hundred yards wide, falls into the Mississippi twelve miles above the Walnut Hills. Its course is through a high, pleasant, and salubrious country, chiefly, however, claimed and inhabited by Indians. They inhabit the country by the course of the river, one hundred and fifty miles from its mouth. It is generally boatable by large boats fifty miles, and in the

higher stages of the water, to the Busha Yalo, the missionary station. There is fine building stone on this river, in positions favorable for conveyance to New Orleans, being the nearest to that city of any on the waters of the Mississippi. It is 'backed up,' as the phrase is, by the Mississippi, in high stages of water, or inundated by its own rise for a number of miles from its mouth. Twelve miles above its mouth are the Yazoo Hills, and four miles higher, the site of fort St. Peter, where was an ancient French settlement, destroyed in 1729 by the Yazoo Indians, a nation which, in its turn, has long since been extinct. On this river and the country which it waters, was the scene of the famous Yazoo speculation, which will be long and bitterly remembered by certain unfortunate speculators; and forgotten as soon as may be, by certain corporate bodies concerned in the sale. Big Black or Lousa Chitto, forty yards wide at its mouth, enters the Mississippi just above the Grand Gulf. Measuring its meanders, it has a course of two hundred miles. It rises between the head waters of the Yazoo and Pearl rivers, and interlocks with the boatable waters of the latter stream. It is navigable, in moderate stages of the water, fifty miles. The hills of this river approach near the Mississippi. At some distance up this river, where the high lands appear upon both sides, some New England adventurers, headed by General Putnam, selected a place for a town. It was in 1773, when this region was supposed to appertain to West Florida. The soil is fine and the situation eligible. There is stone for building, and the place seems to have been judiciously selected. Homochitto is a large stream, having half the comparative length of Big Black. It meanders in a south-west course to the Mississippi. It is formed by two principal forks. A few miles before it enters the Mississippi, it passes through a lake. It traverses a fertile and well settled country of opulent planters. Like the Yazoo, it is inundated for a long distance above its mouth.

Bayou Pierre, Colo's creek, Fairchild's creek, and St. Catharine's creek, enter the Mississippi in succession below Big Black. They have short courses, but generally a fine soil adjacent to their waters. On Bayou Pierre is the important settlement and village of Gibson Port. Buffalo creek enters the Mississippi a little above the heights of fort Adams. Here at Loftus' Heights, commences a chain of hills which stretches north-eastwardly from the Mississippi, and separates the waters of Bogue Chitto and Amite from those of Homochitto and Buffalo. On the southern side of these ridges, the waters flow into the Amite and lake Ponchartrain, and on the northern, into the Mississippi.

The Amite meanders from its source in these hills to the Ibberville or Bayou Manahac, an efflux of the Mississippi. The Amite unites with

this Bayou forty miles above lake Maurepas. The Amite traverses a pleasant, productive, and well settled country, generally timbered with hard woods, and having fine springs.

Pearl river is, next to the Yazoo, the most important river that has its whole course in this state. It rises almost in the centre of the state, between the two parallel ranges of hills that divide it into sections. A number of branches unite to form the main river, which is afterwards increased by the Chunka and other streams. It passes by Monticello and Jackson, and through a country generally fertile, healthy, and pleasant, until it touches the eastern boundary of Louisiana, after which, it receives the Bogue Lousa and Bogue Chitto, and thence, running between this state and Louisiana, it enters the rigolets between lake Ponchartrain and Borgne. The lands watered are for the most part fertile, though it sometimes traverses the sterile region of pine woods. Some legislative efforts have been made to improve the navigation of this stream, which derives importance from its being one of the chief points of communication between this state and the gulf of Mexico. The Pascagoula rises in latitude 33°, and preserves a course parallel to the Tombigbee. It has a length of 250 miles. Vessels of considerable draught ascend it to Leaf river. It receives in its course a great number of tributary streams, of which, Chickasaw, Leaf, Dog, and Tacothamba are the principal. It has some fertile alluvions and hammock lands; but traverses, for the most part, a region of pine country, sterile, but well watered, healthy, and affording in its timber and its conveniences for navigation, a compensation for its want of fertility. At its mouth it broadens into an open bay, on which, at the town of its own name, is a retreat of resort for the inhabitants of New Orleans, during the sickly months.

Islands. Those of the Mississippi are low and inundated. The islands in the gulf, within six leagues of the front of the state, belong to it. They are eight or nine in number, of which Ship and Horn islands are the chief. They are generally sterile and covered with pines and grass.

Climate. This state, excepting a small tract which fronts upon the gulf, constitutes a belt, lying between the wheat and the sugar cane regions; in other words, the climate appropriate to cotton. This is the region where, in the humid places, the long moss is seen attaching itself to the tree. The latanier or palmetto, in the brightness of its winter verdure, gives tropical features to the landscape. Alligators are seen in the stagnant waters. The family of laurels begins to be more numerous, and the laurel magnolia shows itself among them. Southern shrubs and flowers, to one coming from the north, present the aspect of a new climate. It is unfortunate for this state, that its western front, bordering

on the Mississippi, is so much exposed to inundation; and that from the same circumstance, most of the streams that enter the Mississippi, are uninhabitable for some distance from their mouth. At present, in descending the river, the traveller looks in vain, along this very extended front, for the palpable evidence of the opulence for which this state is so deservedly celebrated. He sees a few singular bluffs rising in succession, sometimes at long intervals, from a dreary wilderness of inundated swamp. The river on this front having much higher inundations than lower down, it may be long before the people here will levee the rich alluvions as they have done in the state below. But when it is done, an immense body of the most fertile soil will be redeemed from inundation; and the state will gain as much in salubrity as in opulence. Even as it is, the greater portion of the surface of the state is waving hills, and the whole amount of inundated lands is less than in either of the other southern divisions of this valley.

Compared with Louisiana, its waters have the same fishes, and in winter and spring, the same varieties of water fowls and birds of beautiful plumage and song; and its forests and prairies—for this state, too, has its prairies—the same varieties of trees and flowering shrubs and plants, with very few exceptions, as that state, and they will be described under the head of that state. In health, it has decidedly the advantage. In that state, most of the planters cultivate the deep river and bayou alluvions, and stagnant waters are more abundant. In this state, where the planters are fixed remote from stagnant waters, which in such a southern climate must always be more or less destructive to health, and have access to pure spring water, there is, perhaps, no part of the United States, where the inhabitants enjoy better health. The summers, indeed, are long, and the heat sustained and sometimes intense; and during the last of summer and first of autumn, the people in the healthy districts are subject to bilious attacks, sometimes slightly, and sometimes severe. But in return, they are in a great measure free from pulmonary and catarrhal affections, which are so common and fatal in the more northern regions of the United States. From the centre of this state to its southern front, its climate compares pretty accurately with that of south Alabama, Georgia, the northern belt of Florida, and Louisiana. From October to June, no climate can be more delightful. It has, indeed, in winter, a marked advantage over that of the regions just mentioned. It is somewhat less subject to the frequent and drenching rains of Florida and Louisiana. The people in general are healthy, and in travelling through the state, we see countenances tanned and browned by frequent exposure to a southern sun; but, at the same time, indicating vigorous and cheerful health.

Indians. The principal tribes in this state are the Chactaws and Chickasaws. The numbers of the former tribe are rated at 20,000, and the latter at nearly 4,000. They are at present in a semi-savage state, and exhibit the interesting spectacle of a people intermediate between the hunter's and the civilized state. A curious compound of character results from this order of things. Most of their ancient instincts and habits may still be traced amidst the changes, introduced by agriculture and municipal regulations. Many of them have good houses, slaves, enclosures, and cattle. They have ploughs, looms, and blacksmiths' shops in operation, and are beginning to acquaint themselves with the coarser mechanic arts. They have also commenced the adoption of our laws and modes of judicature. An Indian denominated squire and judge, becomes at once an important personage, and these titles answer instead of a cocked hat, a red coat, and a medal. The different religious denominations in the United States, have made a great and persevering effort to convey to them the blessings of education and christianity. The principal missionary station, under the patronage of the American board for foreign missions, in this state, is at Elliot, on the Yalo Busha creek, forty miles above its junction with the Yazoo, and one hundred and forty five from the Walnut Hills, on the Mississippi. There are a number of subordinate stations connected with this principal one. Each station constitutes a kind of religious family within itself, and has its minister, instructors, male and female, its farmer, or agricultural overseer, and its chief artisans. They are all supposed to be religious characters. Schools for the reception of Indian pupils, constitute a main part of their plan; and, on the wisest premises, they calculate, by showing in their own society and example the influence of christian order and discipline, and by sedulous instruction of children, to communicate education and the rudiments of christianity at the same time, by precept and example; and by showing in their own well cultivated fields, the best modes of agriculture, and by training their youthful pupils in the labors of the field, at once to inspire them with the requisite patience, industry, and love of agriculture, to qualify them for commencing a new and agricultural life. They witness a growing attention of the Indians to the municipal and christian modes of life in the increased number of their pupils, which, from the last reports, appear to be very considerable. They have large fields, good houses, mechanic shops, regular worship; and the praises of God and the Redeemer, in the sweet and cultivated strains of church music, resound in these ancient forests, instead of the war and death-song of the savages. The plan and the whole system are entirely novel in the annals of christian exhortion. It is a kind of protestant monastic establishment, with modifications suited to the more practical views of

that church, and constitutes a most interesting and striking feature in the missionary exertions of the present day. All good minds must be disposed to wish them every degree of success. They have a fine country, fertile soil, hills, springs, prairies, copses, beautiful scenery, and a mild climate, which has hitherto proved as salubrious as they could have anticipated; and their prospects for the future are encouraging. They are, to a certain degree, patronised and aided by the government of the United States.

Agriculture and Pursuits of the People. All the kinds of grains, fruits, and vegetables, that can be cultivated in Alabama, can also be grown here. The sugar cane has hitherto been attempted only on its southern frontier. The sweet orange is raised on the lower waters of Pascagoula and Pearl rivers. The live oak, too, is only seen in this part of the state. In the middle regions, figs, grapes of all sorts, tobacco, maize, sweet potatoes, rice, indigo, squashes, melons, plums, peaches, and various other vegetables and fruits come to full perfection. The castor bean, or *palma christi*, and the benno plant are sometimes raised. In the high and midland regions, it is affirmed that apples and pears arrive at tolerable perfection. This state, being on the southern verge of the medial climate, is a country where a great variety of the articles of the north and the south may be expected to come to maturity.

Cotton is the grand staple, and grows in perfection in all parts of the state. It is, perhaps, too exclusively the object of thought, attention, and cultivation. In the early part of the season, the conversation turns upon the point, how the crop stands; that is, whether it has germinated, and remained in a healthy and vigorous state? The next object of anxiety is, whether it takes, as the phrase is, 'the rot;' then about the favorableness of the season for picking; then the state of the gins, and the amount baled. The last and most interesting of all is the price it is likely to bear. In the halcyon days, when cotton brought twenty-eight and thirty cents per pound, there were planters who had thirty and forty thousand dollars a year, as the income of their crop. In those times, some of the planters secured independent fortunes, and many of them became affluent. Even at the present very reduced prices, no planters in the United States have better incomes in proportion to their capital and hands, than those of this state. The number of working hands on a plantation varies from twenty to two hundred. It is but recently that the inhabitants have been much in the habit of travelling out of their own state. They are, for the most part, a plain, simple, industrious, hospitable, and respectable people, accustomed to a retired life in the interior of the country. They are generally and honorably, with some few exceptions, kind and indulgent masters to their slaves. A few who have acquired fortunes without

much previous education or refinement, and measuring their own knowledge, acquirements, and importance only by their intercourse with their slaves, are astonished when they go abroad, to find that there are other requisites, in order to be sought after and introduced into the best circles, than the possession of money and slaves.

Attention to Schools, Religion, &c. The same appropriations for public works, and for education, are made in this state as in Alabama. The benefits of a common school education are not so extensively enjoyed in any of the southern states of this valley, as could be wished. The whole business is generally managed by subscription and voluntary association. Where this is the case, and where there is no direct interference of the legislature, to compel the people to educate their children, many of the reckless and inconsiderate will suffer them to grow up without any education. There are ample public funds for the endowment of schools; and there is a growing sense of the importance of schools, on the public mind. A seminary, entitled 'Jefferson college,' is incorporated at Washington, near Natchez. It ranks with the academies of the Atlantic country. Another institution, called a college, is incorporated at Shieldsborough; and there are flourishing public schools at Natchez, Woodville, and Monticello.

Constitution. In every principal feature the same as that of Alabama.

Chief Towns. Monticello, the capital of Lawrence county, and recently of the state, is a pleasant and flourishing village, on the west bank of Pearl river. Gibson Port, at the head of navigation on Bayou Pierre, is situated in the centre of a rich country, and is a village of considerable importance. Greenville, Woodville, and Winchester are flourishing villages. Shieldsborough is situated on the west side of the bay of St. Louis. It is swept by the cool breezes of the gulf, and though it has not always been exempt from the ravages of yellow fever, is a famed resort for the inhabitants of New Orleans during the sickly months.

Jackson, near the head of Pearl river, and on a site lately acquired from the Chactaw Indians, has been selected as the permanent seat of government for the state. It is a central, healthy and pleasant position, and the circumstance of its being the political metropolis; will soon cause it to become a place of importance.

Warrenton, below the Walnut Hills, is a considerable village on the banks of the Mississippi, from which are exported large quantities of cotton. Vicksburgh, just below the commencement of the Walnut Hills, is one of the many towns in the western country which have been the growth of but a few years. It is not more than five or six years old, and it is now a considerable village, with a number of stores, lawyers, and physicians. It has a printing press and a journal. Many boats are

always lying in the harbor, and it sends off a great amount of cotton. Steam boats regularly ply between this place and New Orleans. It is a most singular position for a town, on the shelving declivity of high hills, and the houses are scattered in groups on the terraces.

Natchez is by far the largest town in the state, and is incorporated as a city. It is romantically situated on the east bank of the Mississippi, on a very high bluff, two hundred and eighty miles above New Orleans. The river business is transacted at the division of the town which is called 'under the hill,' a repulsive place, and unhappily, but too often the resort of all that is vile from the upper and lower country. Great numbers of boats are always lying here, and the place is filled with boatmen, mulattos, houses of ill fame and their wretched tenants, in short, the refuse of the human race. There are, however, very respectable merchants resident 'under the hill.' The upper town is situated on the summit of a bluff, three hundred feet above the common level of the river, from which there is a prospect of the cultivated margin of the Mississippi, in Concordia on the opposite shore; and the eye traverses the boundless and level surfaces of the cypress swamps beyond. On the eastern side, the country is waving, rich, and beautiful; the eminences presenting open woods, covered with grape vines, and here and there neat country houses. The town itself is quiet; the streets broad; some of the public buildings handsome; and the whole has the appearance of comfort and opulence. It is the principal town in this region for the shipment of cotton, with bales of which, at the proper season of the year, the streets are almost barricaded. Some opulent planters reside here, and there is a respectable and polished society. The physicians and lawyers are distinguished in their profession, and there is no inconsiderable attention to literature. A very numerous population from the contiguous country makes its purchases here, and it is a place of great trade for its size. The people are noted for opulence and hospitality. From the heights in this city, they show you the site of fort Rosalie, the scene of the wild, but splendid and affecting romance of Attala. There is a Presbyterian, an Episcopal, a Roman Catholic, a Baptist, and Methodist church here, and the people show a great, and for the southern country, an uncommon attention to the ordinances of worship and religion. The court house makes a respectable appearance. Notwithstanding the cleanliness, elevation, and apparent purity of the atmosphere of this town, it has been often visited with yellow fever. To this circumstance it is undoubtedly owing, that its population does not advance as might be expected from its beautiful position. It contains not far from 3,000 inhabitants. Steam boats are constantly coming to this place or departing from it; and the arriving and departing gun is heard at all hours of the

day and of the night; and as they are seen sweeping along the majestic river, they add greatly to the grandeur and interest of the scenery of this town.

Washington is a pleasant and healthy village, five miles in the interior from Natchez, and is a resort as a place of retirement from that town when sickly. It is the seat of Jefferson college, which is an institution with considerable endowment, and under its present respectable teachers promises to become a seminary of importance.

History. The greater part of this state was originally occupied by the Chactaws and other Indians. Their title has been chiefly extinguished by purchased cessions of lands. The state, by a recent enactment, has extended its political jurisdiction over them, and declared them subject to its laws.

Mississippi was admitted into the union in 1817. By a recent enactment it has abolished a former law which prohibited the location of a branch bank of the United States in this state. Near Natchez were the central villages of the interesting nation of Natchez Indians, now extinct. Question about the territorial right to this region, was long the apple of discord between the Spanish and French, the Spanish and English, and between the government of the former and that of the United States. Alabama was recently taken from it.

LOUISIANA.

LENGTH, 240 miles. Breadth, 210; containing 48,220 square miles. Between 29° and $33^{\circ} 30'$ N. latitude, and 12° and $17^{\circ} 8'$ W. longitude. Bounded east by Mississippi state, and the gulf of Mexico, and by the river Mississippi from 31° to 33° , and thence by the parallel of 31° to Pearl river; thence by that stream to its mouth; south by the gulf of Mexico; west by the river Sabine, which separates it from the Mexican States, and following that river to the parallel of 32° , thence due north to 33° , thence due east to the Mississippi.

CIVIL DIVISIONS.

Names of the Parishes, &c. Ascension, (parish,) Assumption, (do.) Avoyelles, (do.) Baton Rouge, east, (do.) Baton Rouge, west, (do.) Claiborne, (do.) Concordia, (do.) Iberville, (do.) Lafourche, interior, (do.) Natchitoches, (do.) New Orleans, (city,) New Orleans, (parish,) Catahoula, (do.) Opelousas, (county,) Plaquemine, (parish,) Point Coupee, (county,) Rapides, (parish,) St. Bernard, (do.) St. Charles, (do.) St. Helena, (do.) St. James, (do.) St. John Baptiste, (do.) St. Tammany, (do.) Washington, (do.) Washita, (do.)

Population, by the Census of 1830. Free whites, 89,191. Slaves, 109,631. Total, 215,575. The most populous parts of the state, after New Orleans, are the coast, Feliciana, Attakapas, and Opelousas, and the parishes of Rapides and Natchitoches.

In 1785, what is now the state of Louisiana, contained, under the Spanish government, 27,283 inhabitants. In 1810, it being then the Territory of Orleans, under the American government, it contained 75,556, of which 34,660 were slaves. In 1820, 153,407. This shows a very rapid increase in population. It nearly tripled in seventeen years, preceeding 1810. It more than doubled between 1810 and 1820. Extraordinary as this ratio of increase is, it is by no means in proportion to that of many other of the western states.

No state in the union has a greater body of first rate land; though nine-tenths of the good alluvial district, from the delta of the Mississippi to the mouth of Red river, is either annually overflowed, or perpetually covered with shallow lakes, forever steaming miasm into the atmosphere. Were the same labor and expense which have been bestowed in digging for gold in the gold districts of the south, applied in draining and canalling this vast dismal and noxious swamp, the avails of reclaimed sugar and rice lands would not only yield a hundred times the profit, but New Orleans would become as healthy as any other town in the same latitude, and the centre of a more productive agriculture, and possessing easier water communications with it, than any other city in the world.

The question, why the state which has waste lands as fertile as any in the western country, an agriculture unquestionably the richest, and unrivalled advantages of access to the sea, and of internal water communications, does not people faster, may be answered by the assignment of various causes. The country has universally, abroad, the reputation of being sickly, by impressions founded on exaggerated reports, not at all warranted by facts. New Orleans has been repeatedly desolated, it is true, by the yellow fever; and public opinion has, probably, identified the sickliness of the whole country with that of that city. It cannot be denied, that there are parts of this state which are intrinsically sickly; and that there is much land, and that of the richest character, in the immediate vicinity of immense marshes, lakes, and stagnant waters, the contiguity of which must necessarily be noxious to health. Neither can it be denied, that a country which has such an undue proportion of slaves, is unfavorably situated for advancing in population. Another impediment may be found in the difficulty of adjusting the numerous and conflicting land claims. It has thus happened, that neither the claimants nor congress could bring them into market, for want of adjustment. Large claims to the finest portions of land in the state, have not yet been adjudicated by congress; and purchasers have not felt secure in the titles of the claimants. A country, too, settled by opulent planters, is unfavorably situated for increase in population. It is discouraging to a freeholder, with his naked hands, or a small force, to sit down beside a planter with an hundred working hands. It is natural, that the 'petit paysan' should imagine that he sees contempt in the deportment of his wealthy neighbor towards him. But notwithstanding all these adverse circumstances, this state is making steady advances in population.

Face of the Country, Soil, &c. Three quarters of the state are without an elevation that can be properly called a hill. The pine woods generally have a surface of a very particular character, rising into fine swells, with table surfaces on the summit, and vallies from thirty to forty

feet deep. But they are without any particular range, and like the waves of a high and regular sea. The alluvial soil is level, and the swamps, which are the only inundated alluvions, are dead flats. The vast prairies which constitute a large portion of the surface of the state, have in a remarkable degree, all the distinctive aspects of prairies. To the eye, they seem as level as the still surface of a lake. They are, except the quaking prairies, higher and dryer than the savannas of Florida. A range of hills commences in gentle elevations in Opelousas, rises gradually, and diverges towards the Sabine. In the vicinity of Natchitoches, it preserves a distance intermediate between the Sabine and Red-river, and continues to increase in elevation to the western parts of the state. Seen from the Pine hills above Natchitoches, they have, in the distance, the blue outline of a range of mountains. Another line of hills, not far from Alexandria, commences on the north side of Red river, and separating between the waters of that river and Dudgemony, unites with another line of hills, that bound the alluvions of the Washita, as bluffs, gradually diverging from that river, as they pass beyond the western limits of the state. The new and remote parish taken from Natchitoches, called Claiborne or Allen's settlement, is a high and rolling country. There are considerable hills beyond the Mississippi alluvions, east of that river. But, generally speaking, Louisiana is one immense plain, divided into pine woods, prairies, alluvions, swamps, and hickory and oak lands.

The pine woods are generally rolling; sometimes, but not often, level. They have almost invariably a poor soil, sufficiently described in our account of Florida and Alabama. They possess the same character here, except that creeks are more common, with more extensive and somewhat richer bottoms; and there is, perhaps, a greater proportion of laurels, oaks, and hickories among the pines. The greater proportion of the prairies is second rate land. Some of those west of Opelousas, and between Washita and Red river, are even sterile. Some parts of the prairies of Opelousas are of great fertility, and those of Attakapas still more so. As a general fact, they are more level than those of the upper country. A large belt of these prairies near the gulf, is low, marshy, and in rainy weather inundated. A very considerable extent of them has a cold, clayey soil, with a hard pan near the surface. In other places, the soil is of inky blackness, and disposed in the hot and dry season, to crack in fissures of a size to admit a man's arm.

The bottoms are generally rich, but in very different degrees. Those of the Mississippi and Red river, and the bayous connected with those streams, are more fertile and productive than the streams west of them, and between them and the Sabine. The fertility of the richer bottoms of the Mississippi and Red river, is sufficiently attested by the prodigious

growth of the timber, the luxuriance, size, and rankness of the cane, and the cotton, the tangle of vines and creepers, the astonishing size of the weeds, and the strength of vegetation in general. We have measured a fig tree and a sumach, both ordinarily considered as shrubs, which were larger than a man's body. The richness of the articles of cultivation, is sufficiently well known. The cotton, on fresh lands of the richest quality, grows to the size of a considerable shrub.

The districts of Louisiana which have the richest soils, are the following:—1st. The island of New Orleans. This is so denominated in geography, and correctly. Not far below Baton Rouge, a bayou or efflux, called *Manshac* or *Ibberville*, makes out from the Mississippi, which in its course, receives other waters, until swollen to a considerable river, it falls into lake *Maurepas*. That again is connected by a narrow gorge with lake *Ponchartrain*; and that, by the *rigolets*, with lake *Borgne* and the gulf. The Mississippi insulates it on the other side. Consequently, the island of New Orleans is a narrow strip of land, stretching between this range of lakes and the river. About one-third of the average width of this strip is under cultivation. The other two-thirds are swamp. Its front is the eastern bank of the Mississippi; and its rear is this bayou and this line of lakes. The bayou *Manshac*, which completes the insular character of this tract, is narrow, and is seldom seen by persons descending the Mississippi. This tract is the finest part of that rich country called the *coast*. The *coast* is that part of the bottom of the Mississippi which commences with the first cultivation above the *Balize*; that is to say, about forty miles below New Orleans, and one hundred and fifty above. This belt on each side of the river, is secured by an embankment, called a *levee*, from six to eight feet in height, and sufficiently broad, for the most part, to furnish a fine highway. The river, in ordinary inundations, would cover the greater part of this belt, from two to six feet in depth. It is from one to two miles in width; and perhaps a richer tract of land, of the same extent, cannot be found on the globe. The levee extends something higher on the west than on the east side of the river. Above the levee, on the east bank of the river, are the parishes of *Baton Rouge*, and *East and West Feliciana*. The latter parish received its name from its pleasant surface of fertile hills and vallies, and its union of desirable circumstances for a planting country. This parish presents a spectacle very uncommon in this country: hills that are covered with laurels and forest trees that denote the richest soil. Here are some of the richest planters and best plantations in the state. Bayou *Sarah*, the point of shipment for this region, sends great quantities of cotton to New Orleans. Some of the plantations on this bayou have from five to eight hundred acres under cultivation, worked by a large number of hands.

West of the Mississippi, the bayous Lafourche and Plaquemine, effluxes or outlets from the Mississippi, have the same conformation of banks, and the same qualities of soil, with the parent stream; and where not inundated, are equally fertile. The sugar cane thrives as well upon their banks. No inconsiderable portion of Attakapas is of great fertility, as are smaller portions of Opelousas, which is, however, more generally adapted to become a grazing country. The Teche, which meanders through Opelousas and Attakapas, has generally a very fertile alluvion, the lower courses of which, are embellished with fine plantations of sugar cane. On the Atchafalaya the lands are rich, but too generally inundated. The Courtableau, running through Opelousas, has probably as rich a soil as is to be found in that parish. Approaching Red river from Opelousas, by Bayou Boeuf, we find on that bayou a soil which some consider the richest cotton land in Louisiana. Bayou Rouge has also a fine soil, though it is as yet principally in a state of nature. Bayou Robert, still nearer to Red river, is of extraordinary fertility, and the cane brake along its bank is of astonishing luxuriance. Bayou Rapide, which gives name to the parish through which it runs, is a beautiful tract of land; and the belt on either bank is laid out along its whole course in fine cotton plantations.

The bottoms of Red river are well known as possessing extraordinary fertility; and the lower courses of this river constitute the paradise of cotton planters. The color of the soil is of a darkish red, and appears to derive its great fertility from a portion of salt intimately mixed with it, and from its peculiar friability. It derives its red color from red oxide of iron. It is a wide and deep valley, covered, while in a state of nature, with a dark and heavy forest. Its soil has been accumulating for unknown ages from the spoils of the Mexican mountains, and the vast prairies through which it rolls in its upper courses. All the bayous of Red river, and they are numerous almost beyond computation, partake of the character of the main river.

The parish of Natchitoches has its plantations on the bank of Red river, and its divisions; for the river runs in this parish, for a considerable distance, in three parallel divisions. A vast body of rich alluvial lands, on the river above Natchitoches, is yet covered by unadjudicated claims, or belongs to the United States. The lands on the Washita are black, like those on the Mississippi. The alluvions on the lower courses of this river furnish an admirable soil for cotton and all productions that require the same climate. The finest lands on this river are covered by the unadjudicated claims of the Baron de Bastrop, Maison Rouge, and Winter. These claims are of great extent, and the lands generally first rate. These are the districts in Louisiana most noted for possessing first rate

lands. But in this level region, wholly free from mountains, and precipitous hills, and sterile heaths, there occur even in the pine woods and the poorest prairies, tracts that in other parts of the United States would be called comparatively fertile.

Agriculture and Productions. Wheat and rye do not flourish here. The culture of these grains has been attempted, and it is said with success, in Allen's settlement, in the north-west angle of the state. But in general, the stalks grow too rapidly, and lodge before they come to maturity. Barley and oats succeed well. The latter are generally mowed for fodder at the latter end of April. Maize grows luxuriantly on the alluvions and rich lands. But although this fine crop has a wonderful luxuriance of growth, it is more congenial to the climates of Kentucky, Ohio, Missouri, and Illinois, or the cooler climates of the middle states. In the south, it grows with such rapidity, and is pushed forward so fast by the soil and climate, that it does not rear a stalk of equal size and firmness with that attained in the former climates. Nevertheless, fifty, sixty, and even seventy bushels to the acre, are not uncommon crops. Forty-five bushels may be assumed as the medium crop of the maize lands in this state.

The sweet potatoe, *convolvulus batatas*, in the sandy soils of this state attains its utmost perfection. We have seen one, which weighed nine pounds. They are of different species; but all extremely nutritive, and raised with great ease and abundance. They are the favorite food of the blacks, and constitute an excellent nutriment for all classes. The Irish potatoe is raised with more difficulty, and is not cultivated except for eating in the early part of the summer; and for some cause not yet explained, cannot be preserved through the year.

The usual garden vegetables are cultivated in abundance; though some, as for instance, cabbages, do not grow as fine as at the north. The asparagus is indifferent. Onions do not grow the first year to any size. Small onions, of the preceding year, are placed in the ground for sets. The pumpkin and the melon tribe flourish in this climate. All the northern fruits come to perfection, with the exception of apples. The apple tree covers itself with blossoms and fruit, which, before it ripens, begins to show a black speck, rots, and falls. Figs, of the different kinds, grow in the greatest abundance, and from descriptions of the tree in the eastern continent, we should suppose that it here attains its largest size. They might be raised in great abundance for exportation. All that is necessary for raising this delicious fruit, is to put a slip of the tree in the ground. It is astonishing, that such a fruit, which grows almost spontaneously, is hardly raised, except on a few farms, even for summer eating.

Below Point Coupee on the coast, on the lower courses of the Teche, Lafourche, Plaquemine, and along the whole shore of the gulf, that is to say, in the region of the sugar cane, the orange tree, sweet and bitter, flourishes, and the fruit is of the finest quality. Previous to 1822, oranges were lying under the trees, as the apples at the north. A severe frost that winter, destroyed the trees in this state quite to the ground. The roots have thrown out new trees, which are again in a bearing state. The olive would undoubtedly flourish. It is believed that there are a few trees in bearing in the state. The cultivated vine, *vitis vinifera*, flourishes, and an abundance of fine fruit is offered in the markets. Wild grapes, as the summer, winter, fox, muscadine, and pine wood's grape abound. Berries are neither so common nor so good as at the north. Persimons and pawpaws, and a variety of haws and wild fruit, are common in the woods.

It would carry us beyond our object, to describe the wild and cultivated flowering shrubs which flourish in this region of flowers. The jessamine, the althea and rose class are the most common. The multiflora is a running vine, which attains an inconceivable luxuriance. Two or three summers only are necessary, completely to envelope a building with this grateful verdure and these abundant flowers. China, catalpa, and sycamore are the most common ornamental trees. The abundance of mulberry trees seems to invite the making of silk, in a climate similar to those where it is made in the greatest quantities in the old world.

Agriculture is in its infancy, and in a state of roughness adapted only to the labor of negroes; and has for its object only to obtain the greatest amount of the staple crop. A great number of rich fruits and valuable productions, congenial to such a soil and climate, have been entirely unattempted. Experiments, except in regard to the selection of the best kinds of cotton, and the best mode of growing it, or the kind of cane that is most productive, have not been commenced. One or two spirited individuals have recently attempted to awaken attention to the cultivation of the tea plant. Benne, which yields an oil like that of olives, succeeds well. Indigo was formerly a prime object of attention with the planters. The cultivation has been of late in a great measure abandoned. The rice is remarkably fair, and yields abundantly. There are great extents of land favorable for the cultivation of the upland rice, and no limits can be assigned to the amount that might be raised; but the grand staples being more profitable, little more is raised than for home consumption, in a country where an immense extent of swamps might be profitably devoted to that article. The land brings tobacco of the finest quality. That which is cultivated in the vicinity of Natchitoches is said to equal that of

Cuba. But the culture is not deemed so profitable as that of the great staples.

The cotton cultivated here, is an annual plant, growing in the rich lands more than six feet high, and the larger stalks of the size of a man's arm, throwing out a number of branches, on which form large and beautiful whitish yellow blossoms. A cotton field in flower, is a most gaudy and brilliant spectacle. On the cups of the flower, form balls or cocoons, or as they are here called, forms, in which grow three or four elliptical seeds, four times as large as a wheat kernel, and of an oily consistency. The cotton is the down, with which oily seeds are generally enveloped in the conservative provision of nature. The planting is from March to the middle of May, in drill rows, six feet apart. Much more is planted than is expected to stand. It is thinned carefully, and ploughs in the form of scrapers, are used to clean out the weeds. In September, the process of picking commences, and is renewed two or three times, as successive stages of forms ripen. The weather admits of this operation with comfort to the hands, until the season calls for the clearing and burning the old stocks, in order to commence ploughing for a new crop. This is one of the advantages, that it is a crop which furnishes employment for the hands, during every period of the year. The cotton in the seed undergoes an operation called ginning, by which the down is detached from the seeds, and blown away, while the seeds fall by their own weight. It is then packed in bales, which are pressed and ready for exportation.

The kinds of cotton cultivated are Louisiana, green seed or Tennessee, and recently Mexican cotton. The green seed is not of so fine a staple, but is less subject to the destructive malady called the rot. The Mexican is both of a finer staple, yields more abundantly, and has not hitherto suffered from rot. It is getting into common adoption, and the importation of seed from Tampico and Vera Cruz is becoming a considerable business. Sea island cotton grows well on grounds that have been exhausted by the contiguous cultivation of the other kinds. All the species exhaust the soil; and the seeds, which accumulate in prodigious quantities around the gins, furnish an admirable manure for the exhausted soil. The rot is a disease from which the balls that begin to form after flowering, moulder and fall. No series of properly conducted experiments has been made to ascertain the causes, or to furnish a remedy against this disease. The causes are inexplicable from any thing yet known upon the subject. In some seasons it is much severer than others. New lands are less subject to it than old; and hitherto, the Mexican least of all the species.

Sugar cane is a very rich and abundant article of the growth of Louisiana, raised chiefly on the coast, the shore of the gulf, the bayous, Teche,

Lafourche, and Plaquemine, and some parts of Attakapas south of 31° . It is propagated by laying cuttings of slips or the cane horizontally in furrows, in the latter part of February. The shoots start from eyes of the joints of the slip. When grown, it resembles the rankest broom corn, or perhaps more nearly Egyptian millet. At maturity, it resembles, except the spikes or tassels, that species of maize, called at the north, Carolina corn. When it is cut for the mill, or expressing the saccharine sap, they cut off something more than a foot from the top for slips for planting. The rows in the rich lands are planted six feet apart. It requires the richest soil, the vegetable mould of which should be at least a foot deep. There are three or four varieties or species, as the African, the Otaheite, the West Indian, and the Riband cane. The Otaheite grows luxuriantly, and ripens considerably earlier than the West Indian; but is said to contain saccharine matter, in comparison with the other, only as two to three. The Riband cane is a new and beautiful species, so called from perpendicular and parallel stripes, that have on the stalk the appearance of ribands. We have seen it of uncommon size and weight, and it is said to be highly charged with saccharine juice. Its grand advantage over the other kinds is, that it does not require so long a season for ripening as either of the other kinds, by some weeks. It can probably be raised two degrees farther north than any other kind yet attempted, and after it is cut it does not become spoiled from acidity as soon as the other species. They are making trials of this cane in Opelousas, on Red river, and about Natchez. It is not unlikely, that it will naturalize to the climate considerably north even of those points. Cane is understood to be productive in China, where the frost is much more severe than in any places where it has been attempted in this country. When the habits of plants, in undergoing the process of acclimation, are better understood, it may be, that this rich species of cultivation will be extended to points where it has not yet been even in contemplation. The disadvantage of the Riband cane is, that it has a harder rind or bark than the other kinds, and will require rollers for grinding it driven by steam power.

The sugar cane is a hardy plant, not liable to the diseases either of indigo or cotton. It is cultivated much in the same way with maize. It ripens according to the season it experiences. Rains retard and droughts accelerate its maturity. The abundance of the crop depends upon the number of the joints that ripen before the frost, so as to have the proper saccharine juice to granulate the sugar. A slight frost favors that fermentation which is necessary to the formation of sugar from the sap. A severe frost at once destroys the vegetation of the cane. The cane lies a short time after it is cut, to favor this fermentation. It is then passed be-

tween two iron cylinders, by which the cane is crushed, and the sap is forced out by expression. It flows into boilers, and the process is simply that of evaporation by boiling. The crop while in growth, has great beauty of appearance. The sap is so rich in the stalk of the cane, as to have almost the gummy consistence of syrup; and sugar exists there as nearly in a concrete state as it can be in solution. An acre properly tended, will yield a hogshead of 1,200 pounds for a common crop.

It was formerly a question in this state, which was the most profitable crop, this or cotton? From accurate tables, giving the number of hands, the amount of expenditures, and the average value of product from each, for a number of years in succession, it appears that sugar was the most productive crop, even when cotton bore a much higher price than at present. The cultivation of the cane is diminishing in the islands. That of cotton seems to be every where increasing. There is a vast amount of sugar lands not brought into cultivation. We do not yet grow by any means enough for our own consumption. There seems to be every inducement then, to extend this cultivation in Louisiana, and it is an omen for good that the planters over all the state are turning their attention to this species of culture.

No cultivation in our country yields so rich a harvest. But the work is admitted to be severe for the hands, requiring after it is commenced, to be pushed night and day. It is doomed a more severe and wearing task to work this crop than that of cotton. It has been a general impression, even in this state, where the true state of the case ought to be understood, that sugar could not be made to profit unless the planter had a large force and capital, and could rear expensive houses and machinery. This impression has hitherto deterred small planters from attempting to cultivate the cane. But it has been found by experience, that sugar can be made to profit with as small a capital as is required for commencing a cotton plantation.

Louisiana produces an average crop annually of more than 100,000 hogsheads of sugar, and 5,000,000 gallons of molasses. Whatever general views may be taken of the tariff, it cannot but be admitted on all hands, that the grand result of this cultivation is owing to the protecting duty on sugar; and that this individual branch of agriculture has become in some measure identified with the prosperity of the union in general, and the west in particular.

Such is a sketch of the agriculture of Louisiana. It is the most productive, according to the number of hands employed and acres worked, in the United States. No country, perhaps, Cuba excepted, with the same population, exports of its own growth articles of more value than Louisiana.

Slaves. As this state contains a greater number of slaves, in proportion to its population, than any other in the western country, we shall bring into one compass all the general remarks which we shall make upon the aspect and character of slavery in the Mississippi valley. It will be seen from the table of population, that considerably more than one half of the whole population of this state are slaves. Formerly, they did not increase in this state, and required importations from abroad to keep up the number. But, since experience and humanity have dictated more rational and humane modes of managing the sick and the children, by carrying them during the sickly months to the same places of healthy retirement, to which their masters retire, they are found to increase as rapidly here as they do elsewhere. It is well known, that under favorable circumstances they are more prolific than the whites. Reflecting minds cannot but view with apprehension the remote consequences of this order of things.

It is not among the objects of this work to discuss the moral character of slavery, or to contemplate the subject in any of its abstract bearings. We can pronounce, from what we consider a thorough knowledge of the subject, that the condition of the slaves here, the treatment which they receive, and the character of their masters, have been much misrepresented in the non-slave-holding states. We pretend to none but historical knowledge of the state of things which has existed here in past time. At present, we are persuaded there are but few of those brutal and cruel masters, which the greatest portion of the planters were formerly supposed to be. The masters now study popularity with their slaves. If there must be the odium of severity, it is thrown upon the overseer, who becomes a kind of scape goat to bear away the offences of the master. There is now no part of the slave holding-country in the south-west, where it would not be a deep stain upon the moral character to be generally reputed a cruel master. In many plantations no punishment is inflicted except after a trial by jury, composed of the fellow-servants of the party accused. Festival prizes and rewards are instituted, as stimulants to exertion, and compensations for superior accomplishments of labor. They are generally well fed and clothed, and that not by an arbitrary award, which might vary with the feelings of the master, but by periodical apportionment, like the distributed rations of soldiers, of what has been experimented to be sufficient to render them comfortable. Considerable attention is paid to their quarters, and most of them comfortably lodged and housed.

Nor are they destitute, as has been supposed, of any legal protection coming between them and the cupidity and cruelty of their masters. The 'code noir' of Louisiana is a curious collection of statutes, drawn partly

from French and Spanish law and usage, and partly from the customs of the islands, and usages which have grown out of the peculiar circumstances of Louisiana while a colony. It has the aspect, it must be admitted, of being formed rather for the advantage of the master than the servant, for it proscribes an unlimited homage and obedience to the former. It makes a misdemeanor on his part towards his master a very different offence from a wanton abuse of power towards the servant. But, at the same time, it defines crimes that the master can commit in relation to the slave, and prescribes the mode of trial, and the kind and degree of punishment. It constitutes unnecessary correction, maiming, and murder, punishable offences in a master. It is very minute in prescribing the number of hours which the master may lawfully exact to be employed in labor, and the number of hours which he must allow his slave for meal times and for rest. It prescribes the time and extent of his holidays. In short, it settles with minuteness and detail the whole circle of relations between master and slave, defining and prescribing what the former may and may not exact of the latter. Yet, after all these minute provisions, the slave finds the chief alleviation of his hard condition, and his best security against cruel treatment, and his most valid bond for kind and proper deportment towards him, in the increasing light, humanity, and force of public opinion.

That the slave is, also, in the general circumstances of his condition, as happy as this relation will admit of his being, is an unquestionable fact. That he seldom performs as much labor, or performs it as well as a free man, proves all that can be desired, in regard to the value of those motives, which freedom only can supply. In all the better managed plantations, the mode of building the quarters is fixed. The arrangement of the little village has a fashion by which it is settled. Interest, if not humanity, has defined the amount of food and rest necessary for their health; and there is, in a large and respectable plantation, as much precision in the rules, as much exactness in the times of going to sleep, awakening, going to labor, and resting before and after meals, as in a garrison under military discipline, or in a ship of war. A bell gives all the signals. Every slave, at the assigned hour in the morning, is forthcoming to his labor, or his case is reported either as one of idleness, obstinacy, or sickness, in which case he is sent to the hospital, and there he is attended by a physician, who, for the most part, has a yearly salary for attending to all the sick of the plantation. The union of physical force, directed by one will, is now well understood to have a much greater effect upon the amount of labor which a number of hands, so managed, can bring about, than the same force directed by as many wills as there are hands. Hence, it happens that while one free man, circumstances

being the same, will perform more labor than one slave, one hundred slaves will accomplish more on one plantation, than so many hired free men, acting at their own discretion. Hence, too, it is, that such a prodigious quantity of cotton and sugar is made here, in proportion to the number of laboring hands. The whole process of agriculture is managed by system. Every thing goes straight forward. There is no pulling down to-day the scheme of yesterday, and the whole amount of force is directed by the teaching of experience to the best result.

If we could lay out of the question the intrinsic evils of the case, that would be a cheering sight which is presented by a large Louisiana plantation. The fields are as level and as regular in their figures as gardens. They sometimes contain three or four hundred acres in one enclosure; and we have seen from a dozen to twenty ploughs all making their straight furrows through a field a mile in depth, with a regularity, which it would be supposed, could only be obtained by a line. The plough is generally worked by a single mule, and guided by a single hand, who cheers the long course of his furrow with a song.

Rivers. East of the Mississippi, there fall into that river, Bayou Sarah and one or two other smaller streams. Into the efflux, or Bayou Manshab, or Ibberville, as it passes from the Mississippi to lake Maurepas, fall the Amite and some other inconsiderable streams. The Tchefah falls into lake Maurepas. The Tangipao falls into lake Ponchartrain, as do Chiffuncte and Bonfouca. Pearl river divides between this state and Mississippi, and falls into the rigolets near Pearlington. None of them, except Pearl river, which has been already described, have courses of more than seventy or eighty miles, and they are navigable by schooners to a considerable distance from the lake. They rise in the state of Mississippi. Chiffuncte affords the best harbor on the lake.

The effluxes on the west side of the river, in ascending, are first, the Bayou Lafourche; next, Plaquemine; and the last, Atchafalaya, or, as it is universally pronounced, Chaffalio. Lafourche breaks out from the Mississippi at Donaldsonville, 90 miles above New Orleans, and taking a south-east course, finds its separate channel to the gulf of Mexico about fifty miles west of the Balize. The Plaquemine, still further up, carries out at times a great and sweeping body of water from the Mississippi. After running some distance through a very rich tract of country, it unites with the Atchafalaya in one broad stream, which, before it passes into the gulf, receives the Teche, a stream which passes through the fertile plains of Opelousas and Attakapas.

The Mississippi pursues a very direct course through this state to the sea. It has recently cut for itself a passage across the point of the bend opposite the mouth of Red river, thereby diminishing the distance between

Natchez and New Orleans thirty miles. The same thing must shortly occur at Tunica Bend, both of which will reduce the water distance between those towns from two to three hundred miles. By another 'cut off' in the vicinity of the Chickasaw Bluffs, the distance has been shortened between Natchez and the mouth of the Ohio. In this way, nature and human effort combining, this noble river, in no great length of time, will be made to flow in a right line or reach, as the Mississippi phrase is, to the gulf.

At a very little distance below the mouth of Red river, the Atchafalaya breaks out from the west bank, with an outlet apparently of the same width with Red river, and it is supposed, carrying off from the Mississippi as much water as Red river brings in. It has such a position to the bend of the Mississippi as that immense masses of drift wood and timber, passing down that river, are swept into this outlet. This accumulating mass soon meets with obstructions, and is jammed together into a raft, which rises and falls with the rising and falling of the bayou. A considerable vegetation of shrubs and flowering plants has been found on the surface of this floating timber; and a man might pass directly over this vast mass of waters, without knowing when he was crossing it. The raft is eight or ten miles in extent, and is supposed to contain a mass of more than two million cords of wood and timber. The medial width of the bayou is more than two hundred yards. It has a winding course, traverses many points of the compass, and receives the water of the Mississippi overflow, at a different place in its course. Its length, before it falls into the gulf, measuring its meanders, is nearly two hundred miles, and its comparative course one hundred and thirty.

The Teche commences in Opelousas, receiving a great number of streams that rise in the prairies. It winds through Opelousas and Attakapas, and meets the tide at New Iberia, to which point it is navigable, the Teche having eight feet on its bar, and twenty feet within. It flows about forty-five miles further, before it is lost in the Atchafalaya, which it enters by a mouth two hundred yards wide. It has a course, computing its meanderings, of one hundred and eighty or one hundred and ninety miles.

West of the Teche are the Vermillion, Courtableau, Calcasieu, and Sabine, streams of considerable importance, besides a very great number of smaller streams, which rise, except the Sabine, in the woods on the south-western parts of the state, and thence emerge into the prairies, and unite either with the streams above named, or fall into the lakes which skirt all this front of the state. Indeed, the whole boundary of Opelousas and Attakapas on the gulf, is a chain of lakes, some larger, and some smaller, and almost innumerable. The margin of the sea shore, for some

distance back into the country, is a dead level and below the tides, which are created by a strong south wind, in which case the sea throws its waters over great extents of these marshy plains. When the rivers reach the lakes and the vicinity of the gulf, they communicate with the lakes by many mouths, and by each other with numberless lateral communications; so that the connections of the lakes and the streams form an immense tissue of net work, and the numbers of boatable communications are only known to the inhabitants of their vicinity, who have been long and intimately acquainted with the country.

We may remark in passing, that the soil on the Atchafalaya is red, like that of Red river. From the width of the bayou and its vicinity, we infer that it was once the channel of Red river, by which that river pursued its own independent course to the gulf, without mingling its waters with those of the Mississippi.

The soil on the banks of the Teche is red, and shows, also, that it once had some connection with Red river. Its alluvions have many points of resemblance to those of that river. Like them, these also are of exhaustless fertility. They are settled, in their whole extent, until they become so low as to be subject to inundation. Except the coast above New Orleans, it presents the largest and compactest settlement in the state. It is remarked of this stream, that it presents manifest indications of having once been the channel of a much greater volume of water than it carries at present. The channel grows broader and deeper beyond the Fusilier, for an hundred miles. At the former place, it is fifty yards wide, and at low water, three feet deep. When it enters the Atchafalaya, its channel is one hundred yards wide, and it has twenty feet water. Between the two points, it has received no water to account for this enlargement.

Bayou Bœuf and Cocodri, rising near Red river, in the Pine Hills, wind through a very fertile alluvion, and unite in Opelousas, to form the Courtableau, which waters the richest part of Opelousas. Vermillion, Mermentau, and Courtableau all rise near each other, in level table lands near the centre of Opelousas. Each of them have valuable lands lying on their banks.

We can do no more, in conformity with our limits, than give some of the names of the more conspicuous bayous that go to form those which we have mentioned, and which wind in different directions through the vast prairies between the Atchafalaya and the Sabine. In this distance we cross the Derbane, Waushka, Tensa, Fusilier, Carrion, Cocodri, Bayou Cane, Bayou Mellet, Petit Anse, Bayou Sale, Bayou Nezzipique, Plaquemine, Brule, Queue Tortue, Bayou Chicot, Bayou Grand Louis,

Lacassine, Carrion Crow, and a great number of streams of less importance, that are properly streams of the prairies.

Below the open prairies, there are a number of bayous that belong to the Atchafalaya, and the Plaqueminc; such as the Gros Tete, Bayou Maringouin, Bayou Mansir, an offlux from the Mississippi, Grand and Petit Caillou, Bayou Peau de Chevrull, Bayou Large, and many others.

Near a singular hill between Opelousas and Avoyelles rise the Bayous Rouge and Petit Prairie. They run through a rich soil, and an immensely deep and heavy forest. Bayou Rouge is a circular hill, rising from a great extent of adjacent level and swampy lands, and which, but for its extent, might be taken for an Indian mound. The small and wretched remains of the Tunica tribe of Indians reside here. This tribe, at a distant period, was desolated by a massacre, perpetrated on them by the Natchez Indians. Here, intermediate between Red river and the gulf, and isolated from savage and social man, intercourse with whom has been alike ruinous to them, by inundated swamps and deep and pathless forests, they dwell in solitude.

Before we proceed to describe the two great rivers of Louisiana, Red river and the Washita, whose tracts lead us into the interior, we propose to name the principal lakes of Louisiana, as the larger of them either communicates directly with the gulf, or lie in its vicinity. Lake Maurepas, Ponchartrain, and Borgne form an extended chain east of the Mississippi. Lake Maurepas is of a circular form, and is comparatively small. It communicates with lake Ponchartrain by a narrow pass. Lake Ponchartrain is forty miles long and twenty-eight wide. It communicates by two narrow passes, called rigolets, with lake Borgne, which is thirty-five miles long and twelve wide. These lakes, though navigated by a great number of small vessels, principally schooners, are shallow, except in a channel through their centre. Lake Borgne has seldom more than six feet water, except in this channel. When the wind rises, these shallow lakes are subject to what is called a ground swell, and their navigation is dangerous.

The lakes west of the Mississippi, along the shores of the gulf, and between Red river and Washita, are too numerous for us to enumerate. A complete catalogue, embracing them all, large and small, would swell the number to hundreds. The chief of them are Barataria, Attakapas, Prune, Salt Water, Green, Grand, Mcrmentau, Calcasieu, and Sabine, on the gulf, and Long, Catahoola, Iatt, Saline, Natchitoches, Spanish, Black, Bistineau, Bodau, Pisquota, and many smaller ones between Washita and Red river, and Red river and the Sabine; and Concordia, Homochitto, and Providence lakes belonging to the Mississippi. West of that river are also the smaller lakes, Chittimaches, Natchez, Des Isles, Levy,

Little lake, Paleurd, Quacha, Ronde, St. John, and St. Joseph. Some of these lakes are many miles in extent, and others are little larger than the collection of water called ponds at the north.

That some of them are of recent origin, is proved by the fact that in the midst of them are vast extents of water, out of which rise thousands of deep cypress trees, still standing erect, where boats pass and fish are taken in the driest seasons. As you approach these lakes, which abound in fish, through the deep forests which skirt them, you are warned of your approach to them by observing the trees shrouded in a deeper drapery of long moss. They have generally on their shores a skirt of rich soil, resembling an alluvion.

Sabine. This river rises in Texas, in latitude $32^{\circ} 30'$ and flows southwardly, entering this state at its south-west angle, in the parish of Natchitoches. Thence it forms the dividing line between Louisiana and the states of Mexico. It has a course of four hundred miles; and in high stages of its waters, when the obstructions of small timber rafts are cleared out of it, is susceptible of good steam boat navigation, as high as the great crossing on the road from Natchitoches to the Spanish country. In low stages of water it has but four feet water over the bar at its mouth. Like the other rivers of this state, it broadens into a wide lake before it enters the gulf. It enters it through a vast and solitary prairie of uncommon sterility, uncheered by the distant view of vessels, or any traces of social existence. A few wandering savages are sometimes seen diminished to moving atoms. The wild deer browses unmolested; and the sea fowls scream unterrified by the report of the gun. The prairie is as illimitable by the eye, as the ocean on which it borders. Its wide alluvion contains lands only of second rate quality. It waters the most hilly parts of the state. Among those hills there are frequent streams, some lakes and ponds, and often times small strips of good second rate land. This stream derives its chief consequence from its position, as the line of separation between the United States and Mexico.

Washita. This large river rises in the Masserne mountains, in the territory of Arkansas, in latitude 34° . North fork, Washita fork, and south fork unite to form the main river, which, after flowing something more than one hundred miles, receives from the north, Hot Spring fork. Eight leagues below, it receives the Cado, and the same distance lower down, the Little Missouri. The Saline rises at no great distance from the Hot Springs, and after a winding course of one hundred and fifty miles, flows into the Washita just above the limits of this state. The Bayou Barthelemy rises ten leagues south of the Sabine, and joins the Washita a league above fort Miro. The Chaudron comes in from the south, and the Boeuf and the Macon, having their head waters in Providence lake,

from the north. The latter, with some small streams united to it, forms the Tensa. On the other side comes in Catahoola or Little river. Of this river, the Dugdemony is a principal branch. Little river, in its course, passes through Catahoola lake, and uniting with the Tensa in a deep swampy forest, forms Black river, which, soon after the junction, mixes its waters with Red river.

The soil of the alluvions of Washita, in its lower courses, is black, and extremely fertile. Its upper waters run through a mountainous region, the description of which naturally falls under the head of Arkansas Territory. The lower waters of this river rise in the Pine Hills, and have on their banks second rate land, until a short distance from their union with the main river, when the soil becomes of the same quality with that of the main river. On the alluvions and bayous are already a great number of fine cotton plantations; and there is an extent of rich, unoccupied cotton lands for a much greater number still. The natural productions of this river, and its waters in this state, are considered no way inferior to those of the best parts of the Mississippi, and are the same, with the exception of the sugar cane, which is not known to have been attempted on its waters.

Red River. This is one of the most considerable tributaries of the Mississippi. Its width of channel, in its lower courses, does by no means correspond to its length of course, or the immenso mass of waters which it rolls to its parent stream. But in high waters, when it has arrived within three or four hundred miles of that river, it is often divided into two or three parallel channels, and a line of bayous and lakes connected with it, takes up its superabundant waters, and they are a considerable time in filling, and prevent the river from displaying its breadth and amount of waters, as it does in the high lands five hundred miles above, where the whole river flows through high lands in one broad stream. It takes its rise in a chain of hills near Santa Fe, in New Mexico, called, we know not by what authority, the Caous mountains. In its upper courses it receives Blue river and False Washita. It winds through a region of prairies, on which feed droves of buffaloes, cattle, and wild horses. In these regions it receives a great many considerable tributaries, the names of which have not yet been given. Between the Pawnee and the state of Louisiana, it receives Kimichie, Vasseux, and Little river, from the north. From the south enter the Bois d'Arc, and Little river of the south. The Boda u, Dacheet, Black Lake, and Saline rivers enter Red river after it enters Louisiana. There are fine tracts of land on the Dacheet and Saline. Wells are sunk in a salt plain, near the Saline, from which considerable quantities of salt are made. Black Lake river is a considerable stream, on the banks of which, among the

hills, are found great varieties of petrifications of every sort. Lake Bistineau communicates with Red river. Petrifications abound on its shores, and this remote and romantic sheet of water has some of the most delightful scenery on its shores.

Through the greater amount of its course, Red river winds through immense prairies, of a red soil, covered with grass and vines that bear delicious grapes. On its banks is the favorite range of the buffalo, and other game, peculiar to the vast western oceans of prairies. About thirty leagues above Natchitoches, commences the raft, which is nothing more than a broad, swampy expansion of the alluvion of the river, to the width of twenty or thirty miles. The river, spreading here into a vast number of channels, frequently shallow of course, has been for ages clogging with a compact mass of timber and fallen trees, wafted from the upper regions. Between these masses, the river has a channel, sometimes lost in a lake, and found by following the outlet of that lake back to the parent channel. There is no stage of the water in which a keel boat, with an experienced pilot, may not make its way through the raft. We have seen a considerable steam boat, which was built above the raft and floated through it in an unfinished state. The river is blocked up by this immense mass of timber for a length, on its meanders, of between sixty and seventy miles. There are places where the water can be seen in motion under the logs. In other places, the whole width of the river may be crossed on horseback, and boats only make their way, in passing these places, by following the inlet of a lake, and coasting it to its outlet, and thus finding the channel again. Weeds, flowering shrubs, and small willows have taken root upon the surface of this timber, and flourish above the waters. But in all these places, the courses of the river, its outline, and its bends, are distinctly marked by a margin of forest trees, which grow here on the banks in the same manner as they do where the channel is open.

It is an impediment of incalculable injury to the navigation of this noble river, and the immense extent of fine country above it. There is, probably, no part of the United States where the unoccupied lands have higher claims from soil, climate, intermixture of prairies and timbered lands, position, and every inducement to population, than the country between the raft and Kinichie. This country would be settled with greater rapidity, were it not for the obstruction which this raft opposes to the navigation of the river. The state has made an effort to have it removed. Accurate surveys of it have been made, and the general government has made an appropriation for this purpose. The river above the raft becomes broad, deep, and navigable for steam boats, in moderate stages of the water, one thousand miles towards the mountains.

Below the raft, as we have remarked, the river divides itself into many channels, and fills such a number of bayous and lakes, that lie parallel to the river, that the bare enumeration of their names would carry us beyond our object. The valley of this very interesting river has a width of three or four miles, as high as the Kimichie, or, as it is commonly called, Kiamesia, nearly a thousand miles from its mouth, following its meanders. It broadens as it slopes towards the Mississippi, and has for a long distance from its mouth, a valley from six to eighteen miles in width. Of all the broad and fertile alluvions of the Mississippi streams, no one exceeds this. It compares in many more points with the famous Nile, than the Mississippi, to which that river has so often been likened. Cotton is at present the staple article of the growth of its lower course. Sugar cane is at this time in an extensive scale of experiment, and will probably hereafter be raised in abundance; and the broad and fertile plains of this river as far as Natchitoches, will be converted into sugar plantations. The alluvions of Rapide, Coteille, Bœuf, Robert, Rigolet Bon Dieu, Aux Cannes, and the other waters of the lower parts of the river, in fact of all its waters as far as 32° , seem to be peculiarly fitted for this cultivation. This valley spreads from east to west, instead of north and south, like the Mississippi. The immense masses of cold water which that river brings down from the northern regions, must sensibly affect the temperature of the air on its banks. In descending from Red river to New Orleans, we have observed that vegetation in the spring was more than a week in advance of that on the Mississippi, although farther to the south. We believe that cane will thrive as well on this river in 31° , as it does on the Mississippi in 30° . All the chief streams of the river have the same soil and character with the main river. Indeed, the lands on Bayou Rapide, Robert, and Bœuf, are supposed to be richer than those of the main river. It is considered the best land for cotton in the United States. It is of a reddish tinge, mellow, friable, slightly impregnated with salt, and brings forward in great luxuriance, all the vegetation that is proper to its climate. Its indigo and tobacco are considered the best in Louisiana.

It is deemed unnecessary to enumerate the trees, shrubs, and vines that are common to the valley of this river and the Washita. We have already included them in our general remarks upon the trees of the western country. We shall only remark, that the greater part which belong properly to the northern and middle regions of the country, are also found here. We except the chestnut, although the chinquin, a species of the chestnut, grows here. It wants the orange and the live oak of the more southern parts of the state. The laurel tribe is very abundant, as are the oaks and hickories. In the eastern division of Opelousas, forty dif-

ferent species of trees have been found growing within the space of a few miles. The live oak seems to indicate, that as we advance west in the same parallel, the temperature diminishes. In the western parts of the state it retires to the south, and is no where found so far north as the vicinity of Mobile.

Islands. East of the Mississippi, and fronting this state, there are a number of islands, along the shore of the gulf, the largest of which is called Chandeleur. They are all small, covered with pine and sand heaps. Some of them are inhabited, and rendered fertile by the industry of their owners. Those that lie off the shore of Lake Borgne are considered uncommonly healthy; and some of the inhabitants survive to extreme old age. West of the Mississippi, the principal islands along the gulf shore are Barataria, the noted resort of Lafitte's piratical squadron, Thomas', La Croix, and Ascension islands. The soil of these islands is generally of the richest character. They are covered with a dense forest of live oaks and other trees, and abound in deer, turkeys, and other game. Millions of sea fowls, at the proper seasons, frequent the inlets and bays contiguous to them, and oysters and fish are in the greatest abundance, and of the most excellent quality. Thomas' island is acquiring reputation as a resort for health. From the purity of the air of the gulf, and the cool breeze of the trade winds, and the opportunities of sea bathing, and the refreshing vordure of the island, it would be a delightful summer residence, were it not for the annoyance of its myriads of mosquitos. As it is, it is a charming place in which to pass the winter.

These islands have come in demand, since the recent discovery that their soil and climate are peculiarly favorable to the cultivation of the sugar cane. They will soon be covered with that kind of cultivation. Although there are extensive marshes between them and the high grounds of Attakapas, yet as these marshes are situated north of the islands, and as the summer winds blow almost invariably from the south, they have all the chances for being salubrious, that they would have if they were wholly removed from marshes. Thomas' island is connected with the main land by a cause way. There is an astonishing peculiarity appertaining to this, and most of the islands along this shore. Rising from the sea in the midst of a marsh, skirted by an immense prairie, as level almost as the gulf, and elevated but a few feet above its surface, the islands rise like bluff hills, and have an elevation rated differently from twenty to one hundred feet above the sea, and above the prairies in the vicinity. The singularity of the appearance which they present from this circumstance, can only be readily conceived by one who has seen the country. To

find the cause of this elevation, and to account for it on geological principles, has furnished new employment for geologists.

Beside the sea islands, there are many lake and marsh islands on this shore, some of them of considerable extent. Sicily island, between Catahoola and Natchez, is not only a body of fine soil, but from its position and appearance, presents an aspect of great interest. In the midst of a vast swamp, and insulated by marshes and bayous, and in the season of high waters by the overflow of the Mississippi, a large body of the richest alluvial land, entirely above the highest floods, rises like a glacis to bluffs of pine woods, and we see their ever verdant tops waving above the vast surrounding morass. On this island are some of the best plantations in the parish of Catahoola.

Bays. We have seen that the shores of the gulf are generally low. They are especially so along the front of this state. Vast extents of marsh and trembling prairie interpose between the sea and the cultivable lands. The lakes, inlets, and sounds are connected by an inextricable tissue of communications, and passes accessible by vessels and bay craft, which are impossible to be known, except by pilots perfectly acquainted with the waters. Hence the security afforded to small piratical vessels, commanded by men who could guide them by sinuous and narrow channels, where none but the most experienced pilots could follow them. * The shore is indented by numberless small bays, very few of them affording sufficient water to shelter vessels. Berwick's bay is the only one that has any considerable extent.

Prairies. A very great proportion of the surface of this state is covered with prairies. Almost all these prairies are connected, and form, like the waters of the Mississippi, a family, through which the connection of all the branches may be traced. The prairies that are included under the general name of Attakapas, are the first that occur west of the Mississippi. The parish of Attakapas is situated in these prairies. The name implies '*man eater*,' in the language of the savages who formerly inhabited it, and who are reported to have been cannibals. It is an immense plain of grass, spreading from the Atchafalaya on the north to the gulf on the south. Being open to the gulf, it is generally fanned by the refreshing breezes of that sea. Its aspect of extreme fertility, its boundless plain of grass, its cheering views, its dim verdant outline, mingling with the blue of the sky, white houses seen in the distance, innumerable cattle and horses grazing on the plain, or reposing here and there under the shade of its wooded points, have an indescribable pleasantness to the traveller, who has been toiling on his way through the tangle, the swamps, and along stagnant lakes, and the dark and deep forest of the Mississippi bottom. All at once he leaves the stifling air, the mosquitos, the rank

cane, the annoying nettles, and the dark brown shade, and emerges into this noble and cheerful plain, and feels the cool and salubrious breeze of the gulf. At first, he finds it almost painful to dilate that vision which has so long been confined in the forest, to the contemplation of the boundless prospect before him. He sees, spread out under his eye, an immense tract of beautiful country, containing in 1820, more than 12,000 people, all subsisting by agriculture.

Advancing west, he passes from this to Opelousas prairie, still larger than the other, and computed to contain nearly eight thousand square miles. It is divided by hayous, wooded grounds, points and bends, and other natural boundaries, into a number of prairies, which have separate names and marks of distinction. Taken in its whole extent, it is bounded by the Attakapas prairie on the east, pine woods and hills on the north, the Sabine on the west, and the gulf on the south. The soil, though in many places very fertile, is in general less so, than the former. It atones for that deficiency by being more salubrious, being generally deemed the healthiest region in the state. There are here very considerable cotton plantations, and some of indigo; and the parish which bears its name, is one of the most populous in the state. The people of the former are devoted to the growth of the sugar cane. This is the centre of the land of shepherds. The greater number of the people are chiefly devoted to that employment, and they number their cattle by thousands.

Bellevue prairie is partly in Opelousas, partly in Attakapas. It affords, as its name imports, a delightful prospect. It is watered on its western limits by Bayou Queue Tortue, Plaquemine Brule, Bayou Melet, Prairie Grand Chevrail, Laurent, Alabama, Wikoffs', Le Melles', Avoyelles', Merom or Marom Grand prairie. Calcasieu and Sabine prairies are names that designate the different forms, shapes, and openings of this continuous line of prairies, as it stretches along the settlements from the Plaquemine to the Sabine.

Some of them, as Opelousas, are of immense extent. That of the Sabine is boundless to the vision. Calcasieu is seventy miles long by twenty wide. They are generally so level, as to strike the eye as a perfect plain. They have, however, slight swells and declinations, sufficient to carry the water from them. Though after long rains, they are extremely wet, and immense tracts are covered with water. They have a gentle and imperceptible slope towards the gulf, and generally terminate, before they reach the shore, in wet marshes, into which, when the south wind blows, the sea is driven. These marshes are covered with a luxuriant growth of tall, reedy grass, called cane grass. In various parts of these prairies, there are islands of timbered lands. They generally have an appearance of such regularity and beauty, that a stranger is with

difficulty convinced that they are not clumps of trees, planted out in circular, square, or triangular forms, for the beauty of their appearance. It would be impossible to convey to one who has not felt it, an idea of the effect produced by one of these circular clumps of trees, seeming a kind of tower of verdure, rising from an ocean of grass. Wherever a bayou or a stream crosses the prairie, it is marked with a fringe of timber, which strikes the eye of an observer like the lines of trees in landscape painting.

At the points of these prairies, and wherever the streams and bayous cross them, the soil is rich. But they become of a thinner and more sterile soil, as we advance towards the Sabine. Attakapas is the first and most fertile, and that of the Sabine the last and the most sterile. On the skirts even of the poorer prairies, near water courses and abundant winter range, there is a sparse population quite to the Sabine. The situations are generally selected with a view to their being favorable for the raising of cattle. There are a few cotton plantations beyond Opelousas prairie. But most of the people subsist by raising cattle and horses. Some years since, three men of this region numbered above 15,000 head of horned cattle, and 2,000 horses and mules. Some of the situations on these lonely, but delightful prairies, have been selected with such reference to beauty and prospect, that we question if any in Arcadia surpassed them. They raise sheep, the mutton of which is excellent; but the wool coarse. Many of the horses are of the Andalusian and Numidian breed; and the cattle sleek, slender, elegantly formed, and spirited in their movements. They are driven to New Orleans for a market. Many of the inhabitants are French, clad in leather, abounding with milk and honey, often opulent, but clinging to the simplicity of pastoral life from habit and inclination. The traveller looks round upon thousands of cattle, and a rustic abundance of every thing appertaining to a shepherd's life; and is welcomed with a genuine hospitality, accompanied with French urbanity.

It has been observed, that in advancing towards these sequestered regions the traveller from New Orleans observes a decrease of luxury and refinement corresponding to his advance on his journey, evidencing a similitude of inverted history. He travels through all the different stages of refinement, from the luxury of that showy and expensive city, to the mansions of the opulent and rural planters of Attakapas, the *petits paysans* beyond, and the Arcadian habitations of the French planters near the Sabine.

Avoyelles prairie has a very narrow front on Red river, is rich and alluvial in point of soil, and of moderate extent, being seldom more than three or four miles. It runs back from Red river a considerable distance,

and constitutes the parish the name of which it bears. It is inhabited by cotton planters and people who subsist by raising cattle. They are principally French.

Catahoola prairie, on Catahoola or Little river and the Washita, has, in many respects, a resemblance to that of Avoyelles. This prairie, together with Sicily island, constitutes the chief part of the parish of Catahoola. There are also very extensive prairies between Washita and Red river. They spread in a line, which meanders like the course of the rivers, through the wooded country, until they connect themselves with the immense grassy plains on the upper courses of these rivers. They are generally second or third rate land, for the most part uninhabited, and many of them as yet without a name.

Three new parishes have been recently created by the legislature. The parish of Plaquemine is situated north of lake Borgne, west of New Orleans, and is bounded on the south-east by the gulf of Mexico. The greater part of its surface is swampy. It produces all the articles of culture in Louisiana; but sugar is the staple.

The parish of Orleans includes the city. Chef Menteur, Rigolets, Bayou Bienvenu, Bayou Gentilly, and Bayou St. Johns, are all in this parish, and are famous in the history of the late war. Lake Ponchartrain, lake Borgne, Barataria bay in the gulf of Mexico, Caminda bay, lake Des Islets, lake Rond, Little lake, and Quacha lake are in the limits of this parish. Sugar, and after that, cotton are the staples. Along the coast there are groves of orange trees, and the fig is extensively raised. In this parish are the greater part of the defences that are intended to fortify the city of New Orleans against the attack of a foreign foe. The chief fortifications are on those points by which the British approached the city during the late war. Extensive fortifications of brick have been erected at Petits Coquilles, Chef Menteur, and Bayou Bienvenu, the two former guarding the passes of the Rigolets, between lake Borgne and lake Ponchartrain, and the latter the approach from lake Borgne to New Orleans. A great work, to mount one hundred and twenty cannon, is erected at Plaquemine, on the Mississippi. These works fall not far short of the expense of two million dollars. Fort St. Johns, at the entrance of the Bayou St. Johns into lake Ponchartrain, is well situated for the defence of the pass. It is an ancient establishment of the former regime. The guns are of vast calibre; but they appear to be scaled, and the walls have a ruinous aspect. These points of defence have been selected with great judgment, and have been fortified with so much care, that it is supposed no enemy could ever again approach the city by the same passes through which it was approached by the British, in the last war. New Orleans, the key of the Mississippi valley, and the depot

of its agriculture and commerce, is already a city of immense importance, and is every year becoming more so. This city has strong natural defences, in its position and its climate. It is now strongly defended by artificial fortifications. But, after all, the best defence of this, and all other cities, is the vigilant and patriotic energy of the masses of free men, who can now, by steam boats, be brought down to its defence in a few days from the remotest points of the west. It is not to be forgotten, that by the same conveyance, an enemy might also be brought against it.

Of the other parishes we may remark in general, that as far up the Mississippi as the parish of Baton Rouge on the east side, and Point Coupee on the west, the cultivation of the sugar cane is the chief pursuit. The same may be said of Plaquemine, Lafourche, and Attakapas. The staple article of the western parishes beyond, is cotton. The parishes north of lake Ponchartrain, which formerly made a part of Florida, with the exception of some few tracts, and the alluvions of Pearl river and Bogue Chitto have a sterile soil. They raise large flocks of cattle, and send great quantities of lumber to New Orleans, together with pitch, tar, turpentine, and charcoal. They burn great quantities of lime from the beds of shells, which cover whole tracts near the lakes; and they send sand from the beaches of the lakes, for covering the pavements of New Orleans. They have, also, for some years past, manufactured bricks to a great amount, and transported them across the lake. They have a great number of schooners that ply on the lakes in this and other employments. The people engaged in this extensive business, find the heavy tolls demanded on the canal a great impediment in the way of the profit of this trade. The country, generally, is covered with open pine woods, and has small tracts of second rate land interspersed among them. It is valuable from its inexhaustible supplies of timber and wood for the New Orleans market.

Chief Towns. New Orleans, the commercial capital of the state, and the emporium of western commerce, is situated on the east shore of the Mississippi—in a bend so deep and sinuous that the sun rises to the inhabitants of the city from the opposite shore—in north latitude $29^{\circ} 57'$; and in $90^{\circ} 8'$ west longitude from Greenwich; and in $13^{\circ} 9'$ from Washington; one hundred and five miles, by the meanders of the river, from the Balize, and ninety miles in a direct line; not far from one thousand miles below the mouth of the Ohio, and a little more than one thousand two hundred below the mouth of the Missouri. It is nearly intermediate between Boston and Mexico, although the passage from New Orleans to Vera Cruz is much shorter by sea, than to Boston. It consists of the old city, properly so called, which is built in the form of a parallelogram, of which the longer sides are one thousand three hundred and twenty

yards in length, and the shorter, or the depth of the city towards the swamp, seven hundred yards. Above the city are the suburbs St. Mary and Annunciation. Below the city are the suburbs Marigny, Daunois, and Declouif. These are called Faubourgs. Between the city and the Bayou St. John, are the villages St. Claude and St. Johnsburg. Whoever will look at its position on the map, will see at once its unrivalled advantages of position for a commercial capital. Accessible quickly, and at all times by large ships from the sea, its long distance above it, and the sinuosities of the river, give it uncommon capabilities of defence from foreign annoyance. It has probably twice as much extent of boat navigation above it as any other city on the globe. Taking the length of all the tributaries of the Mississippi, that are navigable and actually navigated by steam boats, it is not extravagant to say that the sum would exceed twenty thousand miles; and these waters penetrate the most fertile soils, and pass through the pleasantest climates. Its advantages of communication with the country immediately adjacent to it, have been overlooked in comparison with those of its relation to the upper country. But even in these respects it is unrivalled. By the basin of the canal and the Bayou St. John, it communicates with lake Ponchartrain and the connected lakes; with the opposite Florida shore, with Mobile, Pensacola, and the whole gulf shore, east and west. Not a few vessels clear from the basin for the Atlantic and Mexican ports. The basin is scarcely distant a quarter of a mile from the ship landing on the Mississippi. A person on the basin wharf can see the masts of the vessels lying on the shore of the levée, and yet a vessel sailing from the basin, would have to sail through the lakes along the gulf shore, and up the Mississippi some hundreds of miles, to arrive at so little distance from her former position. Even the commerce and shipping of the basin would be sufficient for the support of a considerable city. There is an incorporation to connect the lake with the Mississippi by a canal directly from the one to the other. A most necessary and important canal is also contemplated for connecting Attakapas with the city. Nature has almost completed the line of communication. At present, the bayous Plaquemine and Lafourche furnish that communication. Although steam boats run between Opelousas and Attakapas by these routes and the Teche, yet the mouths of these bayous are liable to be choaked with timber, and the navigation is generally attended with some difficulty, and is moreover circuitous. There are so many communications by water between New Orleans and the lower parts of Louisiana, accessible by the smaller boats, that all of them are only known to people who have been in habits, for a long time, of exploring them for the sake of finding new and shorter routes to their destination.

Viewed from the harbor on a sunny day, no city offers a more striking panoramic view. It envelops the beholder something in the form of a crescent. An area of many acres, covered with all the grotesque variety of flat boats, keel boats, and water crafts of every description, that have floated from all points of the valley above, lines the upper part of the shore. Steam boats rounding to, or sweeping away, cast their long horizontal streams of smoke behind them. Sloops, schooners, brigs, and ships occupy the wharves, arranged below each other in the order of their size, showing a forest of masts. The foreign aspect of the stuccoed houses in the city proper, the massive buildings of the Fauxbourg St. Mary, the bustle and movement on every side, all seen at one view in the bright coloring of the brilliant sun and sky of the climate, present a splendid spectacle.

The wooden buildings, of which the city was formerly in a great measure composed, have given place to buildings of brick. The city, properly so called, and the Fauxbourg St. Mary, are compactly and substantially built. In the city, the French and Spanish styles of building predominate. The houses are stuccoed externally, and this stucco, of a white or yellow color, strikes the eye more pleasantly than the dull and sombre red of brick. There can be no question but the American mode of building is more commodious, solid, and durable; but the latter mode has the preference in its general effect upon the eye. To an American, viewing them for the first time, there is something fantastic and unique in the appearance of the city streets, which wears a resemblance to European, French, and Spanish towns, rather than American. The Fauxbourg St. Mary, and many other parts of the city, are built after the American fashion, and have nothing in their appearance different from an Atlantic town.

The city contains six complete squares; each square having a front of three hundred and nineteen feet in length. Each square is divided into twelve lots. Few of the streets, except Canal street, are more than forty feet wide. The names of the principal streets are Levée, Chartres, Royal, Burgundy, Dauphine, Toulouse, &c. The public buildings are the town house, at the north-west corner of Chartres and St. Peter's streets; the hospital, standing in the suburb St. Mary, opposite the square, between Dauphine and Burgundy streets; the cathedral church of St. Louis, in front of Orleans street, upon Chartres street; the convent of Ursuline nuns, upon Ursuline street, between Levée and Chartres streets; the barracks, upon Garrison and Levée streets; the custom house, in front of the square, between Canal and Levée streets; the market house, upon the Levée, in front of the square, between St. Anne and Du Maine streets; Orleans bank, upon Conti, between Chartres and Royal streets; Louisi-

ana bank, upon Royal, between Conti and St. Louis streets; Planter's bank, south-west corner of Conti and Royal streets; government house, north-west corner of Levée and Toulouse streets; district court of the United States, between Du Maine and Phillippe streets; and the water works on Levée street, in front of the square, between Ursuline and St. Philip's streets. A very large and splendid building is fitted up for the state bank. The French theatre is in the city, and the American, in the Fauxbourg St. Mary. The Presbyterian church is also in this Fauxbourg.

The cathedral stands at the head of a spacious square, four hundred feet from the river. The building is of brick, extending ninety feet on the street, and one hundred and twenty back of it. The roof is covered, as are most of the French and Spanish houses, with hollow tile, and is supported by ten plastered brick columns. It has four towers, of which one contains two bells. It has an organ, and is finished within with great massiveness and simplicity. It is an imposing fabric, and the interior seems calculated to excite religious feeling. Under its stone pavements are deposited the illustrious dead. In niches and recesses are the figures of the saints in their appropriate dress, and with those pale and unearthly countenances, which are so much in keeping with the common ideas entertained of them. The walls are so thick, that though in the very centre of business, you hear only a confused whisper within, and are almost as still as in the centre of a forest. You go but a few paces from the crowds that are pressing along Levée street, and from the rattle of carriages that are stationed near this place, and you find yourself in a kind of vaulted apartment, and in perfect stillness. The tapers are burning, and some few are always kneeling within in silent prayer. Images of death, of the invisible world, and of eternity surround you. The dead sleep under your feet. You are in the midst of life, and yet there reigns here a perpetual tranquility. A new Catholic church has been recently erected.

The Presbyterian church is of brick, and is a very large and handsome building. The Episcopal church is small, but light and neat in its structure. The Mariner's church is a respectable building, not yet completed. The prison and the French theatre are very large, and externally, disagreeable buildings, though the *coup d'œil* of the view in the interior of the French theatre is very brilliant. The American theatre, in the Fauxbourg St. Mary, is a neat and commodious building. The charity hospital, though not a very beautiful building, has a moral beauty of the highest order. It is, probably, one of the most efficient and useful charities in the country. New Orleans is exposed to greater varieties of human misery, vice, disease, and want, than any other American town. Here

misery and disease find a home, clean apartments, faithful nursing, and excellent medical attendance. Under this roof more miserable objects have been sheltered, more have been dismissed cured, and more have been carried to their long home, than from any other hospital among us.

The college is a respectable building, and has had ample endowments; but has done little as yet for the literature of the country. There is a convent of Ursuline nuns, who receive day scholars and boarders for the various branches of rudimental education. The female orphan asylum is a most interesting charity, dating its efficient operations from the benevolent donations of the late Mr. Poydras. It has commonly seventy or eighty destitute female children, under sober and discreet instructresses, all plainly and neatly clad, and constantly occupied, either in acquiring the rudiments of education or of needle work. They are dressed in plain uniforms, and worship part of the Sabbath day in the Catholic, and part in the Protestant church. An institution of a similar character for boys, and endowed also by the benevolent Poydras, is now in operation.

There are a number of other charitable institutions in this city, of respectable character; and when the epidemic yellow fever visits it, the manner in which the inhabitants bestow charity, nursing, shelter, and medical aid to the sick, is worthy of all praise. A library for the use of the poorer reading young men of the city has been instituted, and in the extent of her efficient and useful charities, New Orleans is not far behind her Atlantic sisters. There are fewer churches in the city, than in any other town of the same size in the United States. There are but three Catholic places of worship, one Presbyterian, one Episcopalian, a Mariners' church, a Baptist and a Methodist place of worship. Very little observance of the Sabbath, as northern people estimate it, is seen in this city. It is well known, that the forms of the Catholic worship do not forbid amusements on the Sabbath.

No city in the United States contains such a variety of inhabitants from every state in the union, and from every nation in Europe; and there are not a few from the Spanish country, and the islands. There is an astonishing contrast of manners, language, and complexion. One half the population is black or colored. The French population probably as yet predominates over the American. Among the Americans, the inhabitants of the city of New York seem to have the greater number, and there is more intercourse between New Orleans and New York than any other American city. The intercourse with Havana and Vera Cruz is great, and constantly increasing.

The French display in this city, as elsewhere, their characteristic urbanity and politeness, and are the same gay, amiable, dancing, spectacle-loving people, that they are found to be in every other place. There

is, no doubt, much gambling and dissipation practised, and different licensed gambling houses pay a large tax for their licenses. Much has been said abroad touching the profligacy of manners and morals here. Amidst such a multitude, composed in a great measure of the low people of all nations, there must be much debauchery and low vice. But all the disgusting forms of vice, debauchery, and drunkenness are assorted together in their own place. Each man has an elective attraction to men of his own standing and order.

Much has been said abroad, in regard to the unhealthiness of this city, and the danger of a residence here for an unacclimated person has been exaggerated. This circumstance, more than all others, has retarded the increase of this city. Unhappily, when the dog star is in the sky, there is but too much probability that the epidemic will sweep the place with the besom of destruction. Hundreds of the unacclimated poor from the north, and more than all from Ireland, fall victims to it.

In the autumn of 1832, while the cholera was raging on the courses of the Ohio, and desolating the descending steam boats, this city was suffering from a late but severe attack of yellow fever. Early in November, the cholera manifested itself in this city, in conjunction with yellow fever. The more sweeping and terrible disease soon took place of the other. The concourse of reckless strangers, miserable free blacks, and the mass of the poor and vicious, crowded into filthy streets and dirty apartments, together with the acknowledged insalubrity of the city, gave the disease such a development here as had been feared and predicted. Scenes too revolting for relation occurred, notwithstanding the greatest exertions of the police. As at Cincinnati, the disease was sudden in its development and subsidence; and more decidedly than in that place, confined its ravages to the poor and disorderly. The greatest reported number of deaths in one day was 275; and in one week, 1050; a most afflicting and unparalleled mortality for a population of 50,000 people.

The supply of the excellent water of the Mississippi, by the water works now in operation, is very inadequate. It is contemplated to extend the means of supply. No city in the union can be furnished more cheaply and easily. Were the supply equal to washing the streets in every direction, it would tend more to the preservation of the public health, in all probability, than any other conservative means that could be employed; and it is matter of surprise, that such a simple and obvious measure has not already been adopted. It is believed that every street which has the least inclination of descent, might be kept clean by the healthy water of the Mississippi, at a less expense than is requisite for watering Cincinnati. Very great improvements have been recently made, and are constantly making, in paving the city, in removing the wooden sewers, and replacing

them by those of stone. The low places, where the water used to stagnate, are drained or filled up. Tracts of swamp about the town are draining or filling up; and this work, constantly pursued, will probably contribute more to the salubrity of the city, than all the other efforts to this end united.

The commerce of this city is immense, and constantly increasing. There have been counted in the harbor, fifteen hundred flat boats at a time. Steam boats are coming and departing every hour, and it is not uncommon to see fifty lying in the harbor at a time. A forest of masts is constantly seen along the levee, except in the sultry months. There are often five or six thousand boatmen from the upper country here; and it is not uncommon to see forty vessels advertised for Liverpool and Havre. No place in the United States has so much activity and bustle of commerce crowded into so small a space, in the months of February and March. During the season of bringing in the cotton crop, whole streets are barricaded with cotton bales. The amount of domestic exports from this city, exceeds twelve millions of dollars a year, being greater than that of any other city of the union, except New York, and nearly equalling that. The greatest items that make this amount, are sugar and cotton.

It is believed that it will not be long before the great and opulent city of New Orleans, will commence on a scale commensurate with her resources and enterprise, a system of reclaiming the immense swamps, in the midst of which she is placed, by navigable canals.

Notwithstanding the disadvantage of being reported unhealthy, few towns in the United States increase with greater rapidity. Within the last three years, a thousand houses have been added to its buildings, principally fronting along the river in the Fauxbourg St. Mary, most of them massive and commodious. The recently finished rail road from Rampart street to lake Ponchartrain is not only in itself a noble and useful work, but has essentially tended to reclaim from the swamp, a considerable tract in the rear of the city. A bank has recently been created with a capital of 4,000,000 dollars, which, as the condition of the charter, is to make a canal from a point on the river above the city to the lake. There are five banks in the city, with a capital of more than ten millions of dollars; and it is advancing in all points of opulence, ornament, utility, and comfort, in a progress of honorable competition with the other principal American cities.

The rail road is four and a half miles long, perfectly straight, and its ascent and descent only sixteen inches. The avenue on which the road runs is one hundred and fifty feet wide. The eye, at either extremity, traverses its whole length. Standing on the shore of the Mississippi,

the vessels sailing through the lake are seen at the end of the avenue of trees through which the road is cut. An artificial harbor and break-water are constructing on the lake, at the extremity of the road.

The facilities of getting a passage from this city, either to Europe, Mexico, the Atlantic cities, or the interior, are very great. You need seldom remain many days without an opportunity to embark in any direction. Steam boats are constantly advertising for Louisville, and all the different points on the waters of the Mississippi and Ohio; and a passage in the beautiful steam boats that now ply on these waters, is both rapid, cheap, and delightful.

The market, ordinarily, is cheap and abundant; and by seizing the opportunities, the articles of life may be had as cheap as in any other town in the United States. Corn, potatoes, pork, and flour are sometimes so low as scarcely to pay the cost of transport from the upper country. The productions of all climes find their way hither; and for fruits and vegetables, few places can exceed it. On a pleasant March morning, perhaps half the city is seen in the market. The crowd covers half a mile in extent. The negroes, mulattoes, French, Spanish, and Germans are all crying their several articles in their several tongues. In the midst of a confusion of languages, like that of Babel, '*un pication, un pication*,' is the most distinguishable tune. The census of 1830 gives this city 48,453 inhabitants; but there are times in the year when it contains perhaps 60,000.

This city necessarily exerts a very great moral influence over all the western country. There is no distinguished merchant, planter, or farmer in the Mississippi valley, but what has made at least one trip to this place. Here they witness acting at the French and American theatres. Here they go to inspect, if not to take part in the pursuits of the 'roulette, and temple of fortune.' Here they come from the remote and isolated points of the west, to see the '*city lions*,' and learn the ways of men in great towns; and they necessarily carry back an impression from what they have seen and heard. It is of inconceivable importance to the western country, that New Orleans should be enlightened, moral, and religious. It has a numerous and respectable corps of professional men, and issues a considerable number of well edited papers.

The police of the city is at once mild and energetic. Notwithstanding the multifarious character of the people, collected from every country and climate, notwithstanding the multitude of boatmen and sailors, notwithstanding the mass of people that rushes along its streets is of the most incongruous materials, there are fewer broils and quarrels here than in almost any other city. The municipal and criminal courts are prompt in administering justice; and larcenies and broils are effectually pun-

ished without any just grounds of complaint about the 'law's delay.' On the whole, the morals of those people who profess to have any degree of self-respect, are not behind those of the other cities of the union.

New Orleans is one thousand two hundred and three miles from Washington, eight hundred and thirty-two from St. Louis, one thousand six hundred and thirty-four from Boston, and one thousand four hundred and twenty-eight from New York.

Donaldsonville, on the west side of the Mississippi, at the efflux of Lafourche, ninety miles above New Orleans, has a number of houses, and has been selected by the legislature as the place for the future political capital of the state. Baton Rouge is on the east bank of the Mississippi, one hundred and forty miles above New Orleans. It is pleasantly situated on the last bluff that is seen on descending the river. The site is thirty or forty feet above the highest overflow of the river. This bluff rises from the river by a gentle and gradual swell. The United States barracks here are built in a fine style, and are supposed to be among the handsomest and most commodious of that kind of works. From the esplanade the prospect is delightful, including a great extent of the coast, with its handsome houses and rich cultivation below, and commanding an extensive view over the back country at the east. The village is tolerably compact, and has a number of neat houses. The town itself, especially in the months when the greatest verdure prevails, when seen from a steam boat in the river, rising with such a fine swell from the banks, and with its singularly shaped French and Spanish houses, and its green squares, looks like a finely painted landscape. Its population is rated at 1,200.

St. Francisville is a considerable village, situated on the eastern shore of the river, and on a bluff a mile from its banks, and is one hundred and sixty miles above New Orleans. It is a thriving village, of nearly the same size with Baton Rouge. A weekly paper is printed here; and Bayou Sarah, by which the town communicates with the Mississippi, is a noted stopping place for descending boats, and great quantities of cotton are shipped from it. At a considerable distance west of this town, is Jackson, in a healthy position in the pine woods, which is the seat of an incipient college.

On the opposite shore is Point Coupée, a wealthy French settlement. Here the levée commences, and extends thence to New Orleans. Here lived and died Mr. Poydras, celebrated for his wealth and benevolence. He endowed, as we have remarked, asylums in New Orleans, and left many other charitable donations; and among others, the proceeds of a very considerable property, to be distributed in marriage portions to a number of poor girls in the parish of Point Coupée, and in the adjoining parishes.

Galveztown is situated on the Bayou Manshac or Iberville, not far from where it enters lake Ponchartrain. At the mouth of the Tangipao, is the village of Springfield. Madisonville is a small village on the Chiffuncte, two miles from the north shore of lake Ponchartrain. It is a place of considerable summer resort from New Orleans during the sickly months. There are a number of handsome houses of accommodation for such persons. A navy yard was attempted by the government on this river, a few miles above this village. Covington is a considerable village, seven miles above, on the Bogue Falaya, a branch of the Chiffuncte. It is the seat of justice for the parish of St. Tammany, and is the head of schooner navigation on the river. Considerable cotton is shipped from this place. General Jackson's road, leading from lake Ponchartrain to Nashville, passes through this place. Like Madisonville, it is a place of resort for the citizens of New Orleans during the sickly season. Opelousas, the seat of justice for the parish of that name, is a rising village, in the midst of a respectable and compact settlement, two hundred and seventy miles from New Orleans. A weekly gazette is issued from this place. St. Martinsville, on the west side of the Teche, is surrounded by a settlement of opulent planters. New Iberia is also on the west side of the Teche, and being at the head of schooner navigation, in a rich and flourishing country, must eventually become a place of importance.

Alexandria, on Red river, seventy miles from the Mississippi, and one hundred and fifty from the mouth of the river, by its meanders, is situated on the south bank of the river, a half a mile below the fall, at the mouth of Bayou Rapide. It is central to the rich cotton planting country of Bayous Rapide, Robert, and Bruf. It is the seat of justice for the parish, has a bank, issues a weekly paper, has a number of stores, and respectable attorneys and physicians. The site of the town is a beautiful plain, and the village is embosomed in China and other ornamental trees. Vast quantities of cotton are exported from this place.

Natchitoches is eighty miles above Alexandria, by the meanders of the river, and something more than sixty by land. The river is here divided into two parallel branches, and the town is on the south bank of the southern branch. It is the last town of any size towards the south-western frontier of the United States, and is nearly fifty miles east of the Sabine, to which there is a good road from this place. The Spanish trade, for a considerable distance into the interior of the Mexican States, centres here; and it is the great thorough-fare for people going to and returning from those states. The trade from them is chiefly in bars of silver, and horses and mules. We send them in return, manufactured goods, groceries, spirits, and tobacco. It is a very old town, having been established an hundred years ago. There are many French and Spanish

houses, and a considerable number of Spaniards still inhabit it. It is a village considerably larger than Alexandria. The population is American, French, and Spanish, and has a sprinkling of Indian with it; and there is a singular mixture of all these races visible in the common people. There are many respectable families here; and the opulent planters have houses in the town, for the sake of society. The people are excessively fond of balls and dancing. It has a pleasant society, and a weekly newspaper in French and English. The relations of this place with the immense country on the river above, and with the interior of the Spanish country, must necessarily be extended. It is at present a growing place, and will one day become the largest town in this country, except New Orleans. It is beautifully situated on the shore of the river, and extends back to the pine bluffs, on which there are already some handsome houses. It is at the head of steam boat navigation. This place has experienced the successive regimes of the savages, the Spanish, French, and Americans, and has had its war dances, fandangoes, French balls, and American frolics. The traces of the ancient grave yard are almost erased. Indians, Spanish, French, American, Catholics, and Protestants, lie here in mingled confusion. Two or three leagues west of this town, is the ancient Spanish town of Adayes. We can see no where in the United States so fair a sample of an ancient Spanish town as this. The houses are of the construction of an hundred years ago. A little old church, with three or four bells, some of them cracked, and some coarse paintings, give the church an air in-keeping with the town. The inhabitants are all Spanish. Beyond this is the deep gully, called the Rio Hondo, which marked the limits of the Spanish claims east of the Sabine. Half way between Natchitoches and the Sabine, is Cantonment Jessup, where are stationed two companies of United States' soldiers. The station is lonely, but pleasant and healthful. The water from the esplanade runs from its western slope into the Sabino, and from the other into Red river.

This region being the last point towards the Mexican country, it is not strange that it should be the resort of desperate and wicked adventurers, who fly from debt, poverty, the laws, and a guilty conscience. Many lawless characters centre in it.

On Bayou Boeuf there is a small village called Cheneyville. The town of Monroe is the seat of justice for the parish of Washita, and is situated on that river, as is also Harrisonville, the seat of justice for the parish of Catahoola. Monroe is about eighty miles north of Alexandria, in the centre of a rich country, and has a weekly gazette.

Roads and Canals. We have already mentioned the canal Carondelet, which connects the city of New Orleans with lake Ponchartrain by

the Bayou St. John. It is two miles long and perfectly straight. Where it terminates at the north of the city, there is a convenient basin, excavated entirely by art, and sufficiently large to hold a great number of vessels. It was dug at a great expense. Immense labor and expense were necessary to render the bayou navigable, and especially its outlet to the lake, or what is called the 'pickets,' where a former impassible bar has been deepened, and prevented from forming again by the waves and the currents, by piles driven into the sand, and extended a considerable distance into the lake. A provision in the charter of this corporation allows them to extend the canal to the Mississippi. It is proposed to connect the Mississippi, by Attakapas, by a canal; and there is no country in the world where nature has done more towards forming natural canals, which a little labor and expense would complete by artificial extensions. A great number of bayous only need to have the timber cleared out of them to be navigable by steam boats.

There are a corporation and funds provided for rendering Bayou Beauf navigable by steam boats to Red river. It would require no great artificial labor to connect this bayou with the Tche, and furnish steam boat navigation through Opelousas. The country is so level, and the water courses so interlocked by nature, that little more is necessary for this, in most instances, than the digging a broad and navigable ditch. At the same time, that transport is thus rendered easy, the country is drained, swamps are reclaimed, and health is as much subserved as utility.

When this state shall once have imbibed the spirit and feeling of the northern and middle states upon this subject, almost every cotton planter in the country will be able to ship his cotton on board a steam boat directly from his gin. The country being level, the roads, that generally run on the margins of the rivers and bayous, are for the most part good. When the roads diverge to any distance from the bayous and rivers, they soon touch the swampy soil, and in wet weather are intolerably deep, muddy, and heavy.

Constitution and Laws. The Constitution varies little from that of the other western states. The state senators are elected for four years, one-fourth vacating their seats annually. They must possess an estate of one thousand dollars in the parish for which they are chosen. The representatives have a biennial term, and must possess five hundred dollars worth of property in the parish, to be eligible. The governor is chosen for four years, and is ineligible for the succeeding term. His duties are the same as in the other states, and his salary seven thousand dollars a year. The judiciary powers are vested in a supreme and circuit court, together with a municipal court, called the parish court. The salaries are ample. The elective franchise belongs to every free white man of

twenty-one years and upwards, who has had a residence of six months in the parish, and who has paid taxes.

The code of laws adopted by this state, is not what is called the 'common law,' which is the rule of judicial proceedings in all the other states, but the *civil law*, adopted with some modifications from the judicial canons of France and Spain. So much of the common law is interwoven with it as has been adopted by express statute, and the criminal code is for the most part regulated by it. All the laws of the civil code purport to be written, and they are principally selected from that stupendous mass of legal maxims and edicts, called the *Justinian code*. Parishes in this state nearly correspond to counties in the other states; and the parish judge under the civil code, and according to the judicial arrangements of this state, is one of the most responsible and important judicial functionaries.

It would be rather amusing than useful, to go into much detail respecting the modes of administering justice under the French and Spanish regime. The commandant or governor general was at the head of the judiciary and military departments. His code was the Roman law, or that of the Indies; and he represented the king. The department of finance was administered by an officer called the *intendant general*. The office of *procureur general* was one of high consequence, and had an analogy to that of our prosecuting attorneys. But of all the tribunals of the Spanish in their colonies, the most important and popular was the *cabildo*. The *cabildos* awarded the decisions in common civil suits, and were a kind of general conservators of the peace. Subordinate ministers of justice to them were *alcaldes*, *regidores*, *syndics*, and *registers*. Subordinate to the department of finance were the *contadores*, *treasurer*, *intendant*, *auditor*, and *assessor*. Most of these offices were venal, or acquired by purchase. The processes were simple, but rigorous and summary; and many of their maxims of law were founded in the highest wisdom and equity. From whatever cause it happened, the yoke of their government always sat easy on the neck of the Anglo-Americans, who lived under it, and still speak of Spanish times as the golden age. Crimes were rare. The forefathers of the present race of creoles were a mild and peaceable race, as are their descendants at the present day. The ancient inhabitants attached more importance to a criminal prosecution, and felt more keenly the shame of conviction, than the inhabitants of the present day. Summary justice, the terror of the Mexican mines, or the dungeons of Havana, had their share in producing this spirit of submissive quietness and subordination. The penal laws were not more sanguinary than those of most of the states of our union. Only four crimes were declared capital. Persons sentenced to death for the com-

mission of those crimes, often remained long in the prisons of Cuba, either through the lenity or caution of the officers of justice. The code under which governor O'Reilly administered justice, is a most singular specimen of jurisprudence. Among the most frequent crimes against which it provides, are crimes of lust committed by priests, or professed religious, and the heaviest punishments are those annexed to those crimes. There are enumerated some amusing cases, in which pecuniary mulcts are substituted for corporeal punishment, in instances of conviction for these crimes.

Character. If any distinct national character can be predicated of the people of this state, it will apply with the same shades of difference to all the people of the south-western states. We consider the creoles generally a mild and amiable people, with less energy and less irascibility than the immigrants from the other states. The descendants of the French have all the peculiar and distinctive marks of that people in all countries. They possess mild vivacity, and show rather the ingenuity of successful imitation, than the boldness and hardihood of inventive minds. The parents of the present race were insulated from the rest of the world; were plunged in the woods; had no object of ambition, no political career before them; and they were content to hunt, make voyages in their canoes, and smoke and traffic with the savages. Many of them knew neither how to read nor to write. It is otherwise with their descendants. They are generally born to fortunes; have a career before them, and are early taught to perceive the necessity of being educated; and the children of the French are now as generally instructed as those of the Americans. They are fond of shows, the theatre, balls, and assemblies; are extremely polite; and generally more sober and moral than the Americans. The women are remarkable for becoming excellent wives and mothers; and are extremely domestic and economical in their habits. Many of the more wealthy planters cross the sea to spend the summer, and to educate their children in France. The American planters are generally high minded, irascible, social, and generous; much addicted to the sports of the turf and the gambling table. They are fond of hunting and keeping large packs of dogs. Having overseers for the most part over their plantations, they have much leisure time on their hands, and are too apt to become dissipated. There is a rising spirit of literature, and a disposition to read among them, which will innocently, if not usefully and happily employ many of the hours that used to be spent around the gambling table. The people generally are averse to care, deep thinking, and profound impressions; and are volatile, gay, benevolent, easily excited to joy or sorrow; and the common maxim in a sickly climate, where life is precarious, is '*a short life and a merry one.*'

There is a prevalent and fatal propensity to decide quarrels, and even trivial disputes by duels; and many wanton and fatal duels occur, as one of the deepest stains upon the moral character of this people. In many respects, no people are more amiable. They carry the duties of hospitality to great lengths, and extend the kindness of consanguinity almost as far as the Scotch are said to do. The luxury of the table is carried to great extent. They are ample in their supply of wines, though claret is generally drunk. In drinking, the guests universally raise their glasses and touch them together, instead of a health.

No state in the union has made more ample and munificent appropriations, according to its numbers, for the advancement of common school education. For this purpose, eight hundred dollars are annually appropriated in every parish in the state. But the act of appropriation is darkly worded. The application of appropriations is indistinctly defined, and it is much to be feared, that the generous purpose of the laws has not yet produced the fruits that were intended to grow from it. There are in the state, many professional characters of high respectability. Social libraries are introduced into many of the villages. The improving spirit of the age is doing much for them. The rapid communication by steam boats, brings the luxuries, comforts, and improvements of society immediately to their doors, and along with them, more refinement, a higher order of thought, and better tone of feeling. The influence of this course of things upon the moral habits of the planters, is very perceptible in introducing more liberal pleasures, more innocent modes of spending their time, and especially, and above all, more enlightened humanity and policy in their ways of managing their slaves.

Religion. The Catholic is the predominant religion of Louisiana. There are catholic churches in all the considerable villages. But there is probably less protestant worship, in proportion to the numbers, than in any other state in the union. We know of but one Presbyterian church in the state, and that is in New Orleans. The Baptists have some societies, and the Methodists have labored here with the same zeal as in other places. They have a number of societies, and some very respectable members in the state.

ARKANSAS TERRITORY.

GREATEST length, 500 miles. Medial length, 300. Breadth, 240. It contains more than 50,000 square miles. Between 33° and 36° 30' N. latitude; and 13° and 23° W. longitude from Washington. Bounded north by Missouri and the territory beyond; east by the Mississippi, which separates it from Tennessee and Mississippi; south by Louisiana and the Mexican states; west by those states. It was erected into a territorial government in 1819, and contains 25,667 whites, and 4,678 blacks; total 30,383. The limits of this great region are strongly defined by physical and geographical lines. These lines are for the most part large rivers, and the ocean of prairies beyond.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>Chief Towns.</i>	<i>Distance from Acropolis.</i>
Arkansas,	Arkansas Post,	136
Chicot,	Villemont,	184
Clark,	Clark C. H.	87
Conway,	Harrisonburgh,	40
Crawford,	Crawford C. H.	136
Crittenden,	Greenock,	168
Hempstead,	Hempstead C. H.	130
Independence,	Batesville,	102
Izard,	Izard C. H.	172
La Fayette,	La Fayette C. H.	182
Lawrence,	Jackson,	152
Miller,	Miller C. H.	228
Monroe,	Jacob's Staff,	84
Phillips,	Helena,	124
Pope,	Scotia,	81
Pulaski,	Little Rock or Acropolis,	
St. Francis,	Franklin,	
Sevier,	Paraclifta,	168
Union,	Corea Fabre,	
Warm Spring,	Warm Spring,	60
Washington,		

Acropolis is 1,068 miles from Washington, 522 from New Orleans, and 397 from St. Louis.

Face of the Country. In this view, Arkansas is an epitome of the world. For some distance up the waters of Arkansas and White rivers, the country is an extensive, heavily timbered, and deeply inundated swamp. Near the St. Francis hills and at Point Chico, the eastern front along the Mississippi is above the overflow. The remainder of the eastern line is a continued and monotonous flooded forest. It has large and level prairie plains. It possesses a great extent of rocky and sterile ridges, and no inconsiderable surface covered with mountains. Perhaps no section of our country is more diversified in regard to its surface. Its northern line is intersected by a range of hills, which are commonly denominated '*The Black mountains*,' a line of elevations running from Black river to the western extremity of the territory, and separating between the waters of White river and Arkansas. There are ranges of hills, that have the name of mountains, which separate the waters of Arkansas from those of Washita. Near the Warm Springs, these ridges spring up into elevated peaks, which in the eye of a visitor at the springs, from the level country of Louisiana, have the aspect of lofty mountains. At the south-western extremity of the territory, there are three parallel ranges of hills, that divide the waters of Red river from those of Washita. There are, also, many detached hills and flint knobs. On some of these is found the whortleberry, '*vaccinium*,' of the north, in great perfection and abundance. These hills exhibit red cedars and savines, such as grow on hills of a similar appearance on the Atlantic shore. In the central parts of the territory, and intermediate between Arkansas and Washita rivers, on the waters of the latter, is that singular detached elevation, called '*Mount Prairie*.' On the waters of White river and St. Francis, the country generally is rolling. But, take the extent of the territory together, it is either very level or very hilly. In some places, the hills rise at once from level prairies and plains. A very considerable portion of the country is broken land, and unfit for cultivation. A great part of the '*barrens*' of this state are what their name imports. There are four considerable detached bodies of good upland. But it may be assumed as a general fact, that the high prairies and timbered lands are sterile. That part of the course of the Washita which runs in this territory, has narrow, though in some places, rich bottoms. Here are cane brakes, birch, maple, holly, and muscadine grape vines. The tender soil on the banks is often torn away by the sweeping and rapid course of the full river. Rugged hills, covered with stunted pines and cedars, come in close to the river; and the valley is so deep, and its boundaries so abrupt, that the sun is seen but a few hours in the day.

There is a large tract of country on the upper waters of White river, which has sometimes been denominated New Kentucky, either from its being fertile, rolling, and abundant in limestone springs, or from its being more congenial to the staple products of Kentucky than the country lower down. It is sheltered on the north by mountains. The fertile tracts are valleys embosomed between high hills; and the productions of the north and the south, for the most part, succeed in this soil. It has one great inconvenience. The streams that run along its precipitous hills, receive the waters of the powerful showers that occasionally fall, and pour these waters from an hundred sholwing declivities into the streams. They have been known to rise forty feet in perpendicular height, in a few hours. The standing corn and cotton is submerged, and the hope of the year destroyed.

Rivers. Red river has the greater part of its whole length of course in this territory. There is no other river of equal length and importance in our country, about whose sources and upper waters so little is known with exactness and certainty as this. It rises at the bases of a line of spurs of the Rocky mountains, called the Caous mountains, near Santa Fe. Blue river and Fausse Wachitta rise near the sources of the main river, and join it three or four hundred miles from its head spring. There are a number of considerable nameless tributary streams below these principal branches. Some of them have courses of between one and two hundred miles. The Pawnees are the principal inhabitants on this undescribed part of the river. Below their towns and the limits of Louisiana, come in Kimichie, near which is situated the United States' garrison, Vassoux, and Little river of the north; and on the other side, Bois d'Arc and Little river of the south. The south bank of this river, for a long distance, is the boundary between the United States and the province of Texas. Every traveller has remarked, that this river, at the Kimichie, nearly a thousand miles from its mouth, is a broader and apparently a larger stream than at the point where it mingles its waters with the Washita. The reason is; that in the hilly region of the prairies it rolls along in one channel, a broad river, not pouring its surplus waters into bayous or lakes. After it enters Louisiana, its whole course, as we have already remarked, is chequered on either hand with numberless bayous and lakes. We have already mentioned that its waters are red, turbid, and unpotable, from the impregnation of salt mixed with it. Above the raft, it is a fine stream for steam boat navigation. The country on the American side is diversified with prairies, woodlands, hills, and valleys, with a red colored soil. This region is healthy and pleasant. It is affirmed that it produces good wheat, and even productive apple

orchards. From the abundance of peccan and other nut bearing trees, it is a fine country for swine, and opens inviting prospects to immigrants.

Washita rises in mountainous prairies, intermediate between Arkansas and Red river, not far from 34°. The Fourche Caddo, Little Missouri, and Saline rise at no great distance from the sources of the principal stream. It runs through a country generally sterile and mountainous. Pine and that species of oak known in those regions by the name of pin oak, and generally denoting an inferior soil, are the most common kinds of timber. In the richer and alluvial tracts are found the trees common to that latitude. That beautiful kind called *Bois d'Arc*, is here found in greater abundance than any where else in our country. In high stages of the water, it is navigable by steam boats within a few miles of the Hot springs, that is to say, a distance from its mouth of nearly six hundred miles. An hundred salines, some of which are impregnated with salt, are found near the river. Its bottoms are very fertile after it enters Louisiana. When it unites itself with Red river, it strikes the eye as the larger one of the two. It has a course of nearly eight hundred miles.

The principal river of this territory, whence it derives its name, and the next largest western tributary of the Mississippi after the Missouri, is the Arkansas. The extent of this mighty stream, which is said to meander a long distance in the Rocky mountains, is commonly given at two thousand five hundred miles. This is probably an extravagant calculation. It is believed that its distance from a point where it has a volume of waters to entitle it to the name of river to its entrance into the Mississippi, measuring its curves, is about two thousand miles. In summer it pours a broad and deep stream from the mountains upon the arid, bare, and sandy plains. The sand and the dry surrounding atmosphere so drink up the water, that in the dry season it may be crossed many hundred miles below the mountains, without wading as high as the knees. The tributary streams are far from being so well known as to render them susceptible of an accurate description. The chief of them are the Verdigris, Negracka, Canadian Fork, Grand river, Six Bull, &c. Some of them remarkable for being impregnated with salt to such a degree, that we have tasted the waters of the main river so salt as to be unpotable. The whole alluvion earth along the banks is so strongly impregnated with salt, that the cattle sometimes kill themselves by eating it. For a distance of many hundred miles from its mouth, it receives no tributaries of any length of course, owing to the configuration of the country through which it passes, and to the vicinity of Red river and Washita on one side, and the Yellow Stone, Kansas, and Osage on the other. When it has arrived within four hundred miles of the Mississippi, it begins to

assume the character of Red river, in the numbers of its bayous and lakes. The belt of high land between the river and the cypress swamps, is by no means so wide as that on the other river. The alluvial soil is of the same color and qualities, though it is not generally so fertile. It has a broader channel, and generally a narrower valley. We believe that it does not carry so much water; and the rapidity of its ordinary current is less. When it is full, its waters have a still deeper color. Its curves, that is to say, its *points* and *bends*, are broader and deeper. It surpasses the Mississippi, or any river of the west, in the perfect regularity of these, and in the uniformity and beauty of the young cotton wood groves that spring up on the convex sand bars. In other respects it has a surprising resemblance to Red river. Arkansas has decidedly the advantage in the extent of its navigation. In the spring floods, steam boats can ascend it nearly to the mountains. The first thirty or forty miles of its course is through a heavy inundated forest, with very little land sufficiently above the floods to admit of cultivation. Forty or fifty miles of the course of the river above the Post, bluffs crowned with pine come in to the river. Between that distance and the Post, only a narrow belt along the river is above the overflow; and even through this belt the river has torn great numbers of *creeks*, through which, in high floods, its waters escape into the swamps. Directly beyond these belts are gum trees and other vegetation denoting swampy soil. Beyond these are vast cypress swamps; and in all its course, from the bluffs to the mouth, like Red river, it has its net-work chequering of bayous and lakes. The lakes, on the subsidence of the river, are covered with the vast leaves of the *Nymphaea Nelumbo*. The bayous, when filled with the river waters, have the same curves as the river; and while the river is full, the same color; and until we observe their want of current, might easily be, as they have a thousand times been, mistaken for the river itself.

White river has its sources in the ridge called the Black mountains, which divides its waters from those of the Arkansas. Its northern and eastern branches almost interlock with the western ones of the Osage, Maramec, and St. Francis. The western branches rise and run a long distance in Missouri. It enters this territory at its north-west angle, and receives the very considerable tribute of Black river, Thomas' Fork, Red river, Spring river, Strawberry, and other streams, which run through a pleasant, healthy, and fertile country, abounding in pure springs and brooks, and furnishing great numbers of mill seats. Spring river is remarkable for being formed, as its name imports, by the junction of numerous large springs, that gush out of the ground near each other, which

form a stream, at once wide and boatable, abounding in fish, and from its never freezing near these springs in the winter, being visited by great numbers of water fowls. Below the junction of the western branch, the main river receives Red river, *Eau Cachee*, Big creek, and some others. It is called in its Indian appellation by a name denoting White river, from the transparency of its waters, compared with those of Arkansas and the Mississippi. It is uncommonly circuitous in its course, winding three or four hundred miles to make one hundred in direct advance towards its *debouche*. It meets the inundation of the Mississippi a great distance from its mouth, and makes the remainder of its course through a deep swamp.

About seven miles from its mouth is a lateral bayou, apparently of the width of the river itself, which runs out of the river almost at right angles to its course. This bayou flows through a deep and inundated forest six or seven miles and unites with the Arkansas. It is not boatable in the latter part of summer; but in moderate stages of the water is universally used by boats descending the Mississippi and intending to ascend the Arkansas, in order to reach that stream. It strikes that river thirty miles above its mouth. In this bayou the current sets from one river to the other, according as the flood of one preponderates over that of the other. It is three hundred yards wide at its mouth. Its reputed boatable length is one thousand two hundred miles; and its course is so sinuous that in this length it only makes five hundred miles of direct distance. Its upper and middle courses are through a delightful country of hills and valleys, rich alluvions, and pure mountain streams, abounding in limestone, gypsum, stonecoal, and iron ore. The soil in many places compares with the best parts of the western country. From its abundant timber, its useful fossils and earths, its mill streams, salubrity, and facilities for a manufacturing region, it will probably one day become the seat of the manufacturers of this country. Its sheltering line of mountains on the north, and its frequent and precipitous hills secure it from the influence of the sharper air of the Missouri country above, and cause that in many places on the bottoms of this river and its tributaries, cotton is successfully cultivated as a crop.

St. Francis rises in Missouri. It is formed from two main branches, which form their junction just within the northern limits of this territory. The eastern branch has its source below Cape Girardeau, and but a few yards from the bluff banks of the Mississippi. It receives the White Water from the German settlement, in the county of Cape Girardeau in Missouri, and creeps for a great distance through what is called the '*Big Swamp*,' between Cape Girardeau and the mouth of the St. Francis. In this course

it passes within ten or twelve miles from New Madrid. From this point to the mouth of the river, a distance of about three hundred miles, it used to be boatable by large keel boats; and as its current was much gentler than that of the Mississippi, which, in this distance, is peculiarly swift and difficult of ascent, boats for New Madrid used to enter the mouth of the St. Francis, and work up that river to a portage about twelve miles back of that place, and thence cart their goods to that town. The great earthquake of 1811 and '12 completely obstructed the channel, and inundated its waters over the banks to find their way in wide plasches through the swamp. A vast number of lakes and irreclaimable sunken swamps along the valley of this river, were created at the same time. It is navigable in high waters, nearly two hundred miles. There is a respectable settlement about seventy miles up this river. Its waters, notwithstanding it passes through such an extensive country of swamps, are remarkably pellucid. It abounds in fine fish; and we have no where, except in Louisiana, seen finer sport for the angler, than in the St. Francis. In the high lands on the banks of this river, there are many delightful and healthy positions for farmers, who desire such a medial climate. It has the disadvantage of being intermediate between the wheat and the cotton country; but it is believed that it would be an admirable country for the vine and the silk worm. It is remarkable that this river is the northern limit of the muscadine grape in its natural state. There are a number of inconsiderable tributaries to the Arkansas, and streams that have short courses and empty into the Mississippi on the Arkansas shore, that are not here enumerated.

Soil and Productions. The territory of Arkansas is the northern limit of the cotton growing country. The rich lands on the Arkansas, bring cotton of the same staple and luxuriance as those of Red river; but having a season somewhat shorter, it cannot ripen so well. Nevertheless, the planters assert, that even here, they can raise more than their hands can 'pick out,' as the phrase is; consequently, they affirm that they lose nothing by the shortness of their season. We have seen as large cotton growing at Bairdstown, on the Arkansas, as we have seen in any other place. Cotton becomes an uncertain crop north of the river St. Francis. As we ascend the Arkansas towards the high table prairies, the temperature diminishes more rapidly than would be indicated by the latitude; and cotton ceases to be a sure crop beyond 34° in that direction. It is at present the staple article of cultivation. The rich lands bring fine maize, sweet potatoes, and the vegetables generally of Mississippi and Louisiana. In the high country above 34°, wheat does well. Rye and barley will thrive almost in any parts of the country. Mulberry abounds; and on the bases of the precipitous hills of White river, we would suppose would

be the happiest soil and climate for the vine. Muscadine and *pine wood's grapes* abound; as do pawpaws and persimons. Figs are raised, but with difficulty; and the tree is often killed to the ground by the frost. Peaches are raised in great excellence and abundance. Apple orchards do well at Mount Prairie, and in the open and high lands above Peccan Point, on Red river; and no doubt, will thrive in all the higher and more northern regions of this territory. In the lower and more settled parts of it, they have nowhere succeeded well. Chickasaw and prairie plums grow in abundance; and the woods and prairies abound in native fruits and berries.

The soil is of all qualities from the best to the most sterile. The settlement of Point Chico, on the Mississippi, has a soil of the best quality, and is noted for the productiveness of its cotton plantations. The bottoms of the Arkansas are not generally as rich as those of Red river. The belt of cultivated land below the Post of Arkansas, called 'the coast,' does, indeed, somewhat resemble the delightful country so called above New Orleans, in appearance. The resemblance ceases here. It has a soil of but moderate richness, and needs manuring to produce large cotton or Indian corn. To one emerging from the inundated and mephitic swamps below, this line of open, contiguous plantations, dotted with beautiful clumps of the fine trees of this climate, and French habitations, which generally have a very picturesque appearance, this tract, called 'the coast,' has a charming appearance. There is a great extent of cotton lands of the first quality in the country along the river, above the Post, in the 'Quawpaw purchase.' The country five or six hundred miles up the Arkansas, where the American garrison used to be, and that where it now is, and the country where the Arkansas mission is settled, have large prairies interspersed with forest bottoms, and great extents of excellent soil. There is much fine country in this territory above Peccan Point, on Red river. Mount Prairie, which rises, like a prodigious Indian mound, from the subjacent plains, may be reckoned among the striking spectacles of the country. It is ten or twelve miles in diameter, and is situated on the waters of the Washita. It has a soil of great fertility, and of the blackness of ink; rather exposed, however, to 'bake,' as the phrase is, in the hot and dry weather. They obtain water from wells, which require to be dug of very great depth. In the whole depth, vast quantities of sea shells appear. In a state of pulverization they are mixed with the soil, communicating a mawkish and unpleasant taste to the water, and very great fertility to the soil. On White river are some of the finest lands and the healthiest sites for planters in this country. In short, this territory possesses great bodies of the best soil. There are vast tracts, too, of precipitous knobs, sterile ridges, sandy or muddy prairies, and

miserable barrens. The country on the Mississippi between White river and St. Francis, is in many places above the overflow, and of the highest fertility. Wappanocka bottom, opposite Memphis, is an uncommonly high, rich, and extensive bottom. The soil of the St. Francis is very fertile, and is covered with a heavy growth of beech, generally denoting a rich soil; but the hills are so precipitous, and exposed to wash, as hardly to be susceptible of cultivation. On the whole, this territory has a sufficiency of excellent lands to become a rich and populous state. In its eastern front, and near the Mississippi and the Arkansas, it is exposed to excessive annoyance from its myriads of mosquitos.

Climate and Salubrity. This climate is a compound of that of Missouri and Louisiana. Until we advance two hundred miles west of the Mississippi, in its humidity it more nearly resembles the latter. The season, in point of the forwardness of vegetation in the spring, is also much more like that of Louisiana. The season of planting is three weeks later than on the coast above New Orleans, and is more than that in advance of the climate of Missouri. The distribution of rain is extremely unequal. We witnessed drenching rains and thunder every day, for thirty-six days in succession. At other times, it is remarkable for having long droughts. Planting of corn commences by the middle of March, and cotton by the first of April. By this time, the forests of Arkansas are in full leaf, and the shores of no river show a deeper tangle of vines near the soil, and of noble forest trees above.

The shores of Arkansas as far up as Little Rock, are decidedly unhealthy. Great tracts, on all sides, are covered with sleeping lakes and stagnant bayous. The country is a dead level. The falling waters of the rains cannot be drained off. In the commencement of summer they are exposed to the intense ardors of the sun. Sickness is the natural result. On the vast prairie which commences just above the Post, and extends ninety miles up the country, it is more healthy, and there is less annoyance from the mosquitos. This long sweep of country is thoroughly ventilated. But the air in the timbered bottoms is close and unelastic, and the mosquitos are excessively troublesome. There is but too often an abundant visitation of bilious and remittent fevers in the latter part of summer and the first of autumn. Farther up the country, and on the open prairies, it is as healthy as in any other country in the same climate. It is a very absurd idea, that a country of the extensiveness of this, should all be alike sickly. In this territory there are many positions; but a few miles apart, one of which may be as sickly as the shores of Surinam, and the other as healthy as any country in America.

Settlements. The chief settlements on this river are at Point Chico, on the banks of the Arkansas, at Mount Prairie, at Peccan Point, on Red

river, and at Mulberry, six hundred miles up the river, between the mouth of White and St. Francis rivers, and the White River and St. Francis settlements. They are, as most of the settlements in the southern countries are, from the configuration of the country, in isolated and detached situations, generally with great extents of unsettled country intervening.

Chief Towns. The Post is a small village on the north bank of the Arkansas, about fifty miles above its mouth. The position is a kind of bluff bottom, on a fine bend of the river. The soil is poor, but the situation pleasant. The overflow of White river approaches within a short distance of the Arkansas; and the swamps of both rivers can be seen from the court house below the village at the same time. Directly above the village, a bayou is occasionally inundated. The descent of the bench, on which the village is situated, to this bayou, is marked with some of those striking red pillars of earth, where the lighter soil has been washed away, and left these singular columns of clay standing. The same appearances are seen elsewhere on the Arkansas. The inhabitants of the Post and its vicinity are chiefly the remains or the descendants of the first settlers; and they are for the most part of French extract. The population cannot exceed six hundred in the village and the country round it. Acropolis, the seat of government, is at a point about three hundred miles, by the course of the river, and little more than half the distance by land, above the Post. It is on the south bank of the river, on a very high stone bluff, ludicrously called Little Rock, from the prodigious masses of stone about it. The situation is healthy and pleasant, and the circumstance of its being the metropolis, has created a considerable village. There are a number of incipient villages in the places where the county courts are held in other parts of the territory, but none that merit the name of town, if we except the growing village above the mouth of White river. From this place, outfits are made by boats preparing to ascend White river and the Arkansas. It is also noted as a steam boat landing.

Among the curiosities of this country, may be mentioned the vast masses of sea shells that are found dispersed over different tracts of it. They are generally found in points remote from lime stone, and answer a valuable purpose to the inhabitants, who collect and burn them for lime. Far above the political limits of the territory, and towards the sources of the Arkansas, is the sublime elevation which we hope will always retain the name of Pike's mountain. The prairies are bounded in that direction by the stupendous ridges of the Rocky mountains. There are very considerable mountains near the Warm Springs. These springs are among the most interesting curiosities of the country. They are in great numbers. One of them emits a vast quantity of water. The ordinary tem-

perature is that of boiling water. When the season is dry, and the volume of water emitted somewhat diminished, the temperature of the water increases. The waters are remarkably limpid and pure, and are used by the people, who resort there for health, for culinary purposes. They have been analyzed, and exhibit no mineral properties beyond common spring water. Their efficacy then—for they are undoubtedly efficacious to many invalids that resort there—results from the shade of adjacent mountains, and from the cool and oxygenated mountain breeze; the conveniences of warm and tepid bathing; the novelty of fresh mountain scenery; and the necessity of temperance, imposed by the poverty of the country and the difficulty of procuring supplies. The cases in which the waters are supposed to be efficacious, are those of rheumatic affections, general debility, dyspepsy, and cutaneous complaints. The common supposition that they are injurious in pulmonary complaints, seems to be wholly unfounded. It is a great and increasing resort for invalids from the lower country, Arkansas, and the different adjoining regions. During the spring floods of the Washita, a steam boat can approach within thirty miles of them. At no great distance from them, is a strong sulphur spring, remarkable for its coldness. In the wild and mountain scenery of this lonely region, there is much grandeur and novelty to fix the curiosity of the lover of nature. There are no houses of accommodation, but temporary sheds. The visitants spend their time in walking, hunting, and playing cards. Two miles from the springs is the famous quarry of stone, called *oil stone*. Stones from this quarry are already extensively known and used in the western country for the same purposes as the Turkey oil stones. The point of possession of this extensive and valuable quarry, is a matter in litigation.

The mountains in the vicinity of these springs are probably volcanic. The inhabitants affirm that they have heard noises in the neighborhood of the mountains like those which attend volcanic eruptions. There are many volcanic appearances about them, though none of recent eruption. Messrs. Hunter and Dunbar explored this country, and published a detailed account of its geological formation. It exhibits many mineral appearances, though no ores but those of iron have been detected.

Indians. The Quawpaws, intermixed with many fugitive Chactaw Indians, reside on the Arkansas not far above the Post. That portion of the Cherokee nation which has immigrated west of the Mississippi, has its chief settlements on the Arkansas. Beyond this territory, on White river, are congregated the Shawnese and Delawares that have emigrated from Ohio and Missouri. Above the Cherokees, on the Arkansas, are the Osages; and still higher, the Pawnees. In the vast waste of prairies that interposes between this territory and the Rocky mountains, roam dif-

ferent tribes of Indians, among which are often seen the Indians from the Mexican country, who come here to hunt the buffalo.

History. This territory was erected out of that of Missouri in 1819, and soon passed into what is called the second grade of territorial government. Many of the recent settlers were turbulent and unmanageable spirits. There seems to be a strong tendency in American laws and institutions, to create docility and habits of peace. The laws are administered among these people, strangers to the country and to each other, as quietly, in most instances, as they are in the more populous and regulated regions. The inhabitants about the Post were settlers of the country in Spanish times. Many anecdotes of great interest might be given of individuals, of Spanish and Indians, under the Spanish regime. But they are necessarily excluded from the limits of this work. The Spanish and French, at early dates in the history of this country, had establishments on the Arkansas; and they had a settlement at the Post more than half a century ago. No settlement, from its commencement down to this day, has been marked with fewer incidents.

MISSOURI.

LENGTH, 270. Breadth, 220 miles. It contains 60,000 square miles, and 38,000,000 acres. Between 36° and $40^{\circ} 36'$ N. latitude, and between $11^{\circ} 17'$ and $17^{\circ} 36'$ W. longitude. Bounded north and west by the Missouri territory; east and north-east by the Mississippi, which separates it from Illinois; south-east by the Mississippi, which separates it from Kentucky and Tennessee; south by Arkansas territory.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Jefferson.</i>
Boone,	Columbia,	56 miles.
Callaway,	Fulton,	32
Cape Girardeau,	Jackson,	208
Chariton,	Chariton,	79
Clay,	Liberty,	190
Cole,	Jefferson city,	
Cooper,	Booneville,	51
Crawford,	Little Piney,	97
Franklin,	Union,	79
Gasconade,	Gasconade,	47
Howard,	Fayette,	65
Jackson,	Independence,	177
Jefferson,	Herculaneum,	164
Lafayette,	Lexington,	138
Lincoln,	Troy,	97
Madison,	Fredericktown,	170
Marion,	Palmyra,	190
Montgomery,	Lewistown,	67

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Jefferson.</i>
New Madrid,	New Madrid,	278
Perry,	Perryville,	187
Pike,	Bowling Green,	183
Ralls,	New London,	167
Randolph,	Randolph,	96
Ray,	Richmond,	149
St. Charles,	St. Charles,	123
St. Francis,	Farmington,	152
St. Genevieve,	St. Genevieve,	163
St. Louis,	St. Louis,	134
Saline,	Walnut Farm,	85
Scott,	Benton,	236
Washington,	Potosi,	127
Wayne,	Greenville,	110

The census for 1830 gives its population: Whites, 112,065. Slaves, 24,820. Total, 137,427.

Face of the Country. A large extent of this great state, in its south-east angle, commencing above New Madrid and extending down the great swamp, and through the alluvial region, a considerable distance back from the Mississippi, is low, swampy, full of lakes, and in many places subject to be inundated. Beyond that region, which is generally marked by a bold line of rolling and fertile high lands, the country gradually swells into high flint knobs, still rising beyond that region to the mountainous country of the lead mines. This country extends to the Osage and its tributaries. Beyond this, the country is broken and hilly, until we open upon the boundless belt of prairies, which spreads beyond the western limits of this state. The best portion and the most inhabited parts of the state are between the Missouri and the Mississippi. This vast tract is nowhere mountainous. It contains great tracts of alluvial and high prairies. It has, for the most part, a surface delightfully rolling and variegated. There is no part of the globe, in a state of nature, where greater extents of country can be traversed more easily and in any direction, by carriages of any description.

Soil. One specific difference between the soil of this country and that bordering on the Ohio, is, that the land here contains a greater proportion of sand, is more loamy and friable, and the soil not so stiff. There are tracts all over this country where we find the clayey soils of Ohio and Kentucky. But they are small. The roads generally run where the falling rain and snow are so readily absorbed, even in the winter, that the people are not troubled with the deep and almost impassible roads that we find in those states. The rich uplands are of a darkish gray color,

with the exception of the great tract about the lead mines, where the soil of decomposed pyrite is reddish, and of a color brighter than Spanish brown. The poorer uplands are generally covered with white oak, and that small species of oak denominated *pin oak*. It is usually a stiffer and more clayey soil than the other, and of a light yellow color. There are two extensive tracts of that fine kind of timbered upland alluvion which constitutes the finest central portions of Kentucky. The one is fifteen or twenty miles in extent. It is south-west of the mine country, and is called Bellevue settlement. The other tract is much larger, and is called Boone's Lick settlement. There are smaller extents of this kind of land spread over all the state. In a state of nature it strikes the eye delightfully. The surface rolls gently and almost imperceptibly. It has the same trees and shrubs and the grand vegetation that designate the rich alluvions; and at the same time it has the diversified surface, and the associated ideas of health, and springs of water, that are naturally connected with the notion of uplands. These lands are timbered with the same trees as the alluvions. Like those, they are surmounted with grape vines, and free from under brush. The pawpaw, persimon, and wild cherry tree, all denoting rich soils, abound in these regions; and are nearly as fertile as the bottoms of the Missouri or the Mississippi.

The prairies are generally level, and of an intermediate character between the richer and poorer uplands. The alluvial prairies are universally rich, and nearly as fertile as the bottoms. Some tracts of the upland prairies are rich. There are scarcely any lands in this state sufficiently level for cultivation, that have not fertility enough to bring good crops of corn without manure; and in many instances the poorer lands are better for wheat than the richer. The bottoms of all the water courses are rich. There is a specific difference in the soils of the two wide alluvial belts along the two great rivers of this state. The bottoms of the Missouri are generally loamy, with a large proportion of sand. But even where the proportion of sand seems in excess, the soil is of the richest character, and at first more productive than that of the upper Mississippi. Intermixed with the *glaise*, or earth of a greasy and adhesive feeling, is a considerable proportion of marl or dissolved lime, which communicates to the soil—which is compounded in no small share with dissolved vegetable matter—an astonishing fertility.

• The lands of the upper Mississippi bottoms are blacker, more clayey, less marly and sandy, and if not so immediately fertile, are more inexhaustible, and better fitted to sustain the high heats and the drought of summer. The bottoms of the smaller streams partake of the character of the region through which they flow; and are composed of more or less sand, marl, or clay, according as the hills, acclivities, or soils, along

which they flow, have more or less of these ingredients. On the whole, the good lands of this country generally have a great degree of fertility. The vegetable mould is friable, tender, and deep; and in many instances the soils thrown from the bottoms of the deepest wells, appear no less fertile than that on the surface. The rank and abundant vegetation every where indicates the prolific character of nature working at the root. On the richer prairies and bottoms, tall and coarse grass, and weeds resembling hemp, rise up of such a thickness, size, and height, as almost to make it impracticable to travel on horseback. The leaves of the trees and shrubs, by their unusual size and verdure, every where indicate the prolific vigor and power of nature. The upper Mississippi is skirted with a prairie, commencing ten miles above the mouth of the Missouri, and extending along the west bank of the river sixty or seventy miles, with an average width of between four and five miles. The uplands on the upper Mississippi are also extremely rich; but interspersed with round flint knobs, which often rise in regular cones two or three hundred feet high. There are large tracts of poor land in the south-west division of the state, covered with yellow pine, bald and rocky hills, and even moving sands. In fact, this state abounds with the strongest contrasts of soil, from the best to the worst; and there are very extensive tracts of each.

Productions. Hitherto wheat and corn have been the staples of this country. The warmth and looseness of the soil, the large proportions of dissolved limestone in it, and even the dryness of the atmosphere, render it an admirable country for wheat. The season of the year in which wheat matures, is peculiarly adapted to the culture of this rich grain. This period is warm and dry, and seldom has any rains except transient showers. The wheat, however, receives such an impulse from the spring rains, that it matures and fills, even during the severest droughts. Twenty-five bushels to an acre is an average crop, though it sometimes rises as high as thirty. Rye, barley, and oats, though not extensively cultivated, succeed equally well. Corn is also cultivated in the highest perfection. The intense heats of summer agree with it. It throws such deep and strong roots into the soil, that it soon shelters them, by its shade, from the burning ardors of the sun; and the crop has never been known to fail from drought. From fifty to seventy-five bushels to the acre is an average crop, although a hundred are often raised. The droughts are often severe, yet such is the depth and looseness of the soil, that a crop matures. Flax is raised in considerable quantities, and no country will produce better hemp. Its defect is, that it grows too coarse and rank. Tobacco has become an article of extensive culture, and its quality is excellent, as the yield is most abundant. Cotton is raised in the warm

prairies back of New Madrid. It yields a tolerable crop. Sweet and Irish potatoes succeed sufficiently well. This state has lands already fit for the plough, sufficient to produce wheat enough for the whole United States. Prairies of hundreds of thousands of acres of first rate wheat lands, covered with grass and perfectly free from shrubs and bushes, invite the plough; and if the country were cultivated to a proper extent, it might be the granary of the world.

Cultivated grasses have not yet succeeded as well as the other articles of culture. The only kind yet experimented to any considerable degree is timothy; and this requires a close and wet soil, which is a very uncommon one in Missouri. It appears to possess in the highest degree the requisites for the use of plaster. Abundant crops of red clover might be made by this manure. Plaster is found of the best quality, and in inexhaustible quantities, on the waters of the Missouri. From analogy, and the character of the natural grasses, we infer that St. Foin, and the coarser and more succulent grasses will flourish abundantly in this deep and rich soil. Turnips and bulbous rooted vegetables grow to a great size. Pumpkins, squashes, and melons are raised no where in greater abundance. At present, the fodder provided for the stable in winter, is chiefly corn, its leaves and husks, and what is called *prairie grass*. This is a coarse and tall grass, covering the prairies in the greatest abundance. In the early stages of its growth, it resembles young wheat; and in this state furnishes a succulent and rich feed for cattle. They have been seen, when running in wheat fields, where the young wheat covered the ground, to choose the prairie grass on the margins of the fields in preference to the wheat. It is impossible to imagine better butter than is made while the grass is in this stage. Cattle and horses, that have lived unsheltered and without fodder through the winter, and in the spring, scarcely able to mount the hills, through leanness and weakness, when feeding on this grass, are transformed to a healthy and sleek appearance, as if by a charm. But as the summer advances, it becomes tough and wiry. By a strange mistake, this grass is not mowed until after the autumnal frosts. Of course, it is then a harsh and coarse fodder. Were it cut before it has thrown out its seeds and become wiry, it would be equally valuable, and perhaps superior to timothy. It creates an extremely tough sward, but is soon killed by being close fed. An abundant crop of coarse and tall weeds takes its place.

In the meadows, bottoms, and wet prairies, are observed a great variety of grasses, most of them nondescripts. Some, no doubt, would be found worthy of cultivation, and the rather so, as they are naturalized to the soil and climate. Above all countries, this is the land of flowers. In the season, every prairie is an immense flower garden. In the early

stages of spring, rises a generation of flowers, whose prevalent tint is peach blow. The next is a deeper red. Then succeeds the yellow, and to the latest period of autumn, the prairies exhibit a brilliant golden hue.

This state spreads a wide belt, on which are found many trees and shrubs, different from those common in the more southern parts of the valley. They differ, also, from those in the same latitudes on the Ohio. Crab apple trees, pawpaws, and persimons are abundant. We have no where seen such quantities of red and yellow prairie plums. Wild hops cover whole prairies. Peccans, hazlenuts, and nuts of the different tribes of the hickories, are found in great abundance. There are three species of the vine common in all parts of the country. The first is the June grape, that ripens in that month. It is small, sweet, and uncommon; not being found except in untrodden islands in the rivers, or remote places beyond the reach of domestic animals. The French formerly made a pleasant wine from it. It ought to be more known. The summer grape is small, purple, and a tolerably rich fruit in the month of October. When carefully dried in the sun, these grapes are not much inferior to raisins. When ripe, they are too dry to make wine. The winter grape is small, austere, and sour. When matured by the winter frosts, it becomes tolerably pleasant.

From the temperature of the climate, the warmth and looseness of the soil, and more than all, the dryness of the atmosphere, we would suppose this country as favorable for the cultivation of the vine as any other in the United States. The atmosphere is drier here than in Ohio, Kentucky, and Indiana. The fault of the fruit there, is to grow too abundant and succulent. The few attempts that have been made to cultivate the vine here, warrant the conclusion that one day the southern exposures of the gentle eminences will be covered with vines. All the fruits of the northern and middle states thrive in an uncommon degree. The apple tree attains its utmost development and beauty. An inhabitant from the northern states is struck with surprise to see this tree in three years from the time of its transplanting, and as soon as it attains the size of a man's wrist, loading itself with fruit. Peach trees break down from the weight of their fruit. Pear trees, apricots, and nectarines, though they have been introduced in but few instances, prosper. This seems to be the native country of fruit trees. Few attempts have yet been made to inoculate and engraft good kinds of fruit trees, and every thing, in most instances, has been left to nature. Apples are already abundant in the older settlements. Barley yields a fine crop; and it is hoped that not many years will elapse, before beer and porter, drinks so proper for this hot climate, will take the place of that murderer both of soul and body, whiskey. The mulberry tree is common in the woods; and this is, un-

doubtedly, among the best of the middle climates for breeding the silk worm and making silk. In short, every production of the northern and middle states thrives here. The heats of summer and the dryness of the atmosphere, peculiarly fit this soil for the cultivation of the medicinal plants, rhubarb, palma christi, and the poppy.

Animals. Bears, wolves, and panthers, are as common as in the more southern regions. The prairie wolf, the most mischievous of the species, is but too frequent. Buffaloes and elk are only found in the prairies beyond the limits of this state. Deer, as the Indians retire, and as cultivation becomes more common, are seen to increase in numbers. They are so frequently noted, from four to twenty in a drove, even in the immediate vicinity of the populous villages, as to be no objects of curiosity. That large and mischievous species of the mole, called gopher, is extremely annoying on the prairies and barrens. It is seldom seen on the timbered bottoms. These animals live in communities, in the vicinity of which they raise thousands of eminences. They form these eminences by removing the earth from their holes, by a pouch with which nature has furnished them on each side of their mouth. They are extremely mischievous in corn and potato fields; and in gardens they prey upon all kinds of bulbous roots. Their bite is said to be poisonous. The prairie dog begins to be seen in the western extremities of this state.

Rattle snakes, copper heads, and ground vipers are found in the unsettled regions, and especially near the flint knobs and ledgy hills. The small and pernicious rattle snakes, called snappers, live in great numbers in particular places on the prairies. Poisonous reptiles are not so common, as in unsettled regions of the same latitude, where the country is generally timbered. Burning the prairies, undoubtedly destroys multitudes of them. The ponds, lakes, and rivers, during the spring and autumn, and during the migrating season of water fowls, are literally covered with swans, pelicans, cranes, geese, brants, and ducks, of all the tribes and varieties. Many of these fowls rear their young on the islands and sand bars of the large rivers. In the autumn, multitudes of them are killed for their quills, feathers, and flesh. The birds called quails in New England, and partridges here, are numerous, as is also a bird somewhat larger than a domestic hen, called the prairie hen. In the autumns of some seasons they are seen hovering over the corn fields in flocks of hundreds. They are easily taken, and when fat, are fine for the table. There are two larger and still more beautiful species of the grouse tribe found far up the Missouri. Turtle doves are always numerous, as in some seasons are the wild pigeons. Singing birds are not so common as in the country farther south, or the more settled and cultivated regions of the north. It is a striking fact, that they become more common in any

region, as cultivation advances. The robin red breast is seen in flocks in the autumn, but does not rear its young here. The magpie or French black bird, that is so frequently heard chattering its notes in the meadows of New England in spring, has only been observed here since the country has begun to be peopled and cultivated. The red bird or Virginia nightingale, rears its young and spends the winter here, and on a mild day in winter, its mild whistle is delightful in the deep forests. The blue bird is heard in all the mild days of winter. The beautiful parrot frequents the sycamore bottoms, and poorly compensates by the extreme beauty of its plumage for the injury it does the orchards.

The domestic animals are the same as elsewhere in the United States. The wide prairies, every where covered with grass, invite the raising of cattle. Many of the farmers possess great droves; and they may be multiplied to an indefinite extent. The cattle are fine, and the beef good. When the same attention is here bestowed upon rearing the best kind of horses, that is given to the subject by the Pennsylvania farmer, that noble animal will be raised in the utmost perfection. Sheep prosper, nor does the fleece degenerate. North of 40°, on the prairies between the Missouri and Mississippi, shepherds will one day find their homes, and their sheep will yield the finest and best wool. At present, the wolf is a fatal enemy to them; and the number of weeds that bear burs is so great, that their fleeces become matted and tangled with them, and in detaching, the staple of the fleece is injured. Swine are raised with greater facility than in Ohio. Hickory and acorn bearing trees are more abundant than in that state. On the whole, for rearing cattle, sheep, and horses, this state and Illinois have advantages over any other of the western states.

Agriculture. There is no country in which a farm is made with less difficulty, or where tillage is more easy. A great proportion of the land is fit for the plough. The soil is easy to work. The greatest obstacle in the way of present farming, is the want of good fencing materials. Stones are seldom to be found, and no where, except in quarries and ledges; and when found, they are not used for the purpose of fencing. Unless forests are planted, there will soon be an absolute want of a sufficiency of any kind of timber for fencing. The substitute ought to be found in hedges. Whenever the farmers of this country understand their true interests, they will immediately commence the planting of hedges. The subject has as yet engaged the contemplation of only a few intelligent husbandmen. They have thought that the native gooseberry, which here grows wild, and of a tangled luxuriance unknown in the country east of the Alleghanies, would be sufficiently thorny and impenetrable for a hedge. Others have recommended the thorny locust, or *acacia*, the crab apple

tree, the privet, a most beautiful shrub of the laurel class, used in the middle states to form borders and walks. There seems no good reason why the British hawthorn or the Columbian thorn should not be adopted for this purpose. It would grow here more rapidly than in Pennsylvania and Delaware, where it soon becomes a fence sufficient to turn cattle. The beauty of a wheat field in full verdure in autumn, in contrast with the brown of the prairies, is a striking feature in the cultivated landscape. It would be more so, when its outline was skirted with a living and verdant hedge. The planting of the Alleghany white pine and the chesnut ought also to be objects of immediate attention. The scarcity of wood and timber imperiously calls upon those who have any thought for the generations to come, to attend to this sort of improvement.

Houses, &c. But a few years since, a house of better structure than a temporary log cabin, was a rare object. The ease of obtaining subsistence was so great, and there was for a considerable time so little emulation among the people, that they hardly consulted comfort, much less ornament. Most of the first settlers were backwoodsmen, used to the hardships of a laborious life. Indolent, and satisfied with the supply of the most common wants of nature, they lived in open and miserable habitations which neither excluded the rain, heat, or cold. It was a long time before the country had mills, and the materials for building bore a high price. Sites for water mills are not common. But such have been found. Mills on the principle of the inclined plane, and steam mills have been commenced. Good houses have been reared, not only in the towns and villages, but in the country. Log cabins and log houses are disappearing in all directions, and better houses are taking their place. Rivalry and emulation have been inspired; and the people have been often tempted to build more showy houses than were requisite either for comfort or conformity to the circumstances of the builder. Brick and stone houses have been generally preferred.

Climate. Soon after we descend below the mouth of the Ohio, the climate begins to verge towards a southern one. This state occupies a medial position, and has a temperature intermediate between that of New York and Louisiana. From the circumstance that the valley of the Mississippi spreads like an immense inclined plane towards the gulf of Mexico, it results that north and south winds alternate through this valley. This fact applies most strongly to the immediate valley of the Mississippi. As the prevailing winds blow either up or down the valley, the changes are great and sudden. When the breeze, for any length of time, descends the Mississippi, the weather becomes cold; and if the same direction of the wind continues for successive days, and it be winter, the Missouri and the Mississippi are frozen, and the mercury falls below zero. After

this wind has prevailed for a length of time, the opposite wind gets the ascendancy again, and it is not uncommon to have days when one can sit at the open window with comfort in January. Hence, the climate is extremely fickle and variable. The transitions are so rapid, as not only to be uncomfortable, but to have an unfavorable effect upon the constitution. But the country is always exempt from those damp, and if it be winter, piercing north-east breezes, that prevail so much on the Atlantic shore.

The winter commences about Christmas, and is frequently so severe as to bridge the mighty current of the Missouri so firmly that it may be passed for many weeks with loaded teams. In the winter of 1818, this was the case for nine weeks. During this period, however, there are often truly warm days, with a sky perfectly brilliant, and destitute of that leaden hue which it has at the same period on the Atlantic shore. Snow seldom falls more than six inches deep, and generally does no more than cover the ground, disappearing after two or three days. Its severity ceases with February. Through the months of March and April, there are frequent summer days, and the trees sometimes blossom in the former month. But it seldom happens, that there are not alternations of cold even into May. On the whole, instead of the climate becoming more mild as we advance west on the same parallel, it is believed that the reverse is the case. The greater part of the summer is intensely hot. The country is bare and open to the full influence of the sun. The soil, moreover, is of a warm and sandy texture, strongly imbibing the sun's rays. The sky, for the greater part of the summer, is brilliant and cloudless. All these circumstances concur to give this country a warm summer. Nevertheless, the openness of the country and its freedom from mountains, which impede the course of the winds, always creates more or less of a breeze, which tempers the heat and renders it more endurable.

Another circumstance which distinguishes this climate from most others on our continent, is its extreme dryness and purity. Evaporation takes place with great rapidity. It differs in this respect from the wooded valley of the Ohio, and still more from that of the Mississippi below the mouth of the Ohio. Polished steel, in the southern parts of the Mississippi valley, contracts rust in a few hours, and the dews are like rains: The three years, 1816, '17, and '18, gave an average of only fifty cloudy days in the season, and not more than twenty-five that were rainy. The average amount of rain that falls in Missouri, does not exceed eighteen inches a year. There are exceptions, however, as in the year 1811, commonly called by the French, *l'annee des eaux*, in which year it was thought there fell more than forty inches. The two great rivers that

year filled their bottoms in some places quite to the bluffs; and their courses were often five or six miles wide. The Missouri country may be pronounced, in the general, a dry one. The steady rains are from the south-west. The long rains that occur in the Atlantic country without thunder, seldom happen here. The summer rains are generally thunder showers. They rise near the courses of the great rivers, and appear to be supplied by evaporation from them. The lightning is vivid, and the thunder loud and frequent. The autumn of Missouri, in common with the whole Mississippi valley, is serene, temperate, and delightful.

Such is the general aspect of the climate. But in a country so large and open, seasons sometimes occur very wide from this general character. The uniformity of the autumns is indeed almost invariable. But the general character of this climate is, that less reliance can be placed upon the analogy of the past as a clue to the future, than on almost any other of which we have read.

Salubrity of the Country. When it was first settled by the Americans, there were some years of extraordinary mortality, which acquired for the country a character of sickliness. A part of this fatality may be fairly attributed to the circumstance, that the immigrants were unsheltered, except by miserable hovels, and that there were few mills to supply the people with bread. The diet was changed. The modes of life were changed. The people were imprudent and exposed. The season was uncommonly rainy. On the level lands and in the hollows, rested immense quantities of stagnant water, which escaped only by the evaporation of a powerful sun. One or two sickly seasons have occurred since. In the neighborhood of inundated bottoms, where waters escape during the floods from the rivers, and are retained in the gullies and ponds in the vicinity of small lakes and stagnant waters, the effect is the same here as elsewhere, with the added inconvenience, that the heats of summer and the powerful evaporation consequent upon the heat and dryness of the atmosphere, increase the noxious activity of the causes of disease. Whenever an unacclimated family fixes itself in the vicinity of such collections of water, it may calculate upon sickness. Intermitting fevers are the consequence of inhaling the miasm of swamps and decaying vegetation, the change of temperature from the coolness of the night to the heats of day, exposure to the heavy dews, and various other mixed causes. Intermitents are the most common diseases of the country. The tendency of all complaints in the summer is to assume a bilious type. Bilious fevers are apt to prevail in the autumn. In some seasons they are endemic in particular districts. They sometimes take the form of continued fevers, and are then dangerous. More frequently they are

remittents, and when properly managed, yield readily to medicine. If the attendance of a judicious physician is early and constant, they are seldom fatal. Pleurisy and lung fevers sometimes prevail in the winter. Pulmonic complaints, attended with cough and terminating in consumption, notwithstanding the inconstancy of the weather, are uncommon. There is no doubt that increase of population and cultivation, by draining stagnant waters and removing the redundant vegetation, directly tends to increase the salubrity of a new country. In process of time, this must become a healthy country. It cannot be accounted a sickly one at present. Except in deep bottoms and unfavorable situations, the chances of life and health are as favorable here as in most countries which are reputed healthy.

Scenery, Roads, &c. The hills, or, as they are called, the Ozark mountains of the mine country, are sufficiently precipitous and grand to add the sublimity of mountain scenery to the prospect. In the bottoms and along the mountain streams, contrary to the common assertion in books, the soil has uncommon fertility; and we have not witnessed scenery of a character more solitary, wild, and beautiful, than in the mine country. Along all the considerable water courses, there are those bluffs that in the western country mark the alluvial outline of streams. In some places, especially on the upper Mississippi, they swell to high hills, which run out at right angles from the river, and seem like mountainous waves of the sea, suddenly arrested and fixed. Compared with the northern states, and these partial exceptions aside, the habitable part of Missouri is one vast plain. We have already described the prairies of the west. All know that the name is a French one, importing a meadow. Those who have not seen a prairie, may easily form a conception of one. Yet the grandest objects of nature will not excite more surprise in the mind of a traveller from the Atlantic states, than the first view of a prairie. Riding day after day through forests, where the small improvements made in the wilderness scarcely interrupt the unbroken continuity of woods, he opens at once upon the view of a boundless horizon. He beholds, outstretched under his eye, a perfectly level plain, of the most soft and beautiful verdure, covered with flowers of every scent and hue. Here and there, in the skirts of the prairies, and often in their centre, are clumps of oaks, peccans, and black walnuts, disposed in forms so regular, and generally circular, as cannot fail to fill the eye of an admirer of the ancient style of gardening. He is unprepared for a view in such strong contrast with the dark and lonely forests. It is impossible to convey by description, the impression which these views create. In the vast prairies, or on the verge of the bluffs that overlook them, taking into view the verdant ocean of grass, the vast rivers, rolling their mighty masses of waters through

the dark forests, the romantic hills stretching away in the distance, and here and there a cabin or a house throwing up its column of smoke, and the cattle, horses, and sheep, sleeping about it, this country furnishes enchanting landscapes for the pencil.

There are as yet few roads, that are wrought. Nature has been more indulgent to this country, in this respect, than perhaps to any other. It is neither a boundless sandy plain, nor a tame and level prairie; but a diversified surface of gentle hills and easy slopes. Wherever the current of passing has marked a road, it is generally a good one. If a person in a carriage is dissatisfied with the beaten one, he selects one for himself, and can travel with ease, in most instances, through the untrodden forest. The roads are passable at all times of the year; and seldom muddy more than two or three days in succession. This circumstance eminently distinguishes this country from that on the Ohio.

Minerals, Fossils, &c. The Rocky mountains, which are a continuation of the mineral mountains of New Mexico, so abundant in the precious metals, probably contain them too. Travellers, who have ascended the Missouri to its sources, say that gold dust is mingled with its sands, at the mouth of the Roche Jaune, or Yellow Stone. Fossil coal is found in great abundance along the Missouri. It abounds near St. Charles and St. Louis. The extent of the veins and the quality of the coal have not been much tested. In a region so bare of wood, these internal provisions for that deficiency will one day be thoroughly explored, and found to constitute one of its essential resources. Most beautiful specimens of plaster are brought from the Platte. Immense bodies of iron are found in Belloyuc, on Big river and its waters, and in various points back of Herculanum, and on the St. Francis and Black rivers; and iron ore is indicated in all points of this state. Maganese, zinc, antimony, and cobalt, are dug along with lead ore in the lead mines. Red and white chalk, flint, ochres of different colors, common salt, nitre, steatite, marl, plumbago, porphyry, jasper, chalcedony, ponderous barytes, and pumice stone are found in the country. It is affirmed that cinnabar, or the red ores of mercury, are found here. Marble and blue limestone abound; and the lime made from it is of the best quality. Porcelain clay, of the finest quality abounds near Cape Girardeau. Along the banks of the Missouri, in many places the bluffs are composed of thin, smooth, and perfectly regular strata of rock, apparently composed of iron and limestone. They resemble slate, and it is believed would answer the same purpose for covering houses. The flint knobs are curiosities. They abound in the south-west part of the state, and along the upper Mississippi. They are frequently in the shape of cones, rising three hundred feet with a base often less than a mile in diameter. They are composed

of siliceous masses of stone, among which are thousands of *flèche*, or arrow stones, which serve the Indians for gun flints. Pumice stones, of the most beautiful specimens, are often seen floating on the Missouri. The Indian pipe stone, so abundant on the river St. Peter, is said to be found in this state. It is of beautiful dark red color, and receives a polish equal to alabaster. Pyrite of copper is found dispersed over the country, in various places. The river *Cuivre* was so named by the French, from supposing that its banks abounded in copper ore. Masses of pure, malleable copper, weighing from three to ten pounds, are shown as native curiosities. Splendid specimens of chrysal are often discovered.

But the mineral, for which this region is more particularly noted, is that of lead. Lead ore is dug in various parts of the state; and there is no doubt but it may be found every where in a line of hills reaching from the Illinois lead mines, near Rock river, quite across the Missouri. These mines will more properly be described under the head of the state of Illinois. In speaking of the lead mines of Missouri, we shall confine ourselves to those which are in the county of Washington and the region contiguous. This district extends nearly a hundred miles in length, and forty miles in width; though discoveries as they are called, are constantly making in the regions adjoining, in the one direction quite to the Missouri, and in the other to White river. But the principal 'diggings' are included in an extent of fifteen miles in one direction, and thirty in the other. The centre of this district is from fifty to seventy miles south-west from St. Louis, and little more than half that distance from Herculaneum on the Mississippi, and thirty to fifty from St. Genevieve. The lead is principally wagoned from the mines to both places, to be thence transported down the Mississippi and up the Ohio. A great number of wagons are constantly employed in this occupation. This tract is abundantly watered by Big river and its branches. No part of the country west of the Mississippi is watered by a greater number of clear and full mountain streams. These streams are branches of Big river, which is itself one of the principal branches of the Maramée. The hills, or mountains, lie in alternate ridges. Some are sterile; and some have a rich and productive soil. The valleys between them are almost uniformly fertile. The declivity of one ridge is covered with masses of chrysalized spar of every form and size. This is called 'mineral blossom.' Most beautiful samples may be easily selected from this infinite variety. It is the custom not to dig where it lies on the surface. The ore is sought where this spar is found about two feet below the surface. The earth is of a bright color, between red and yellow, and the ore is generally found imbedded in rock and hard gravel.

It is remarkable, that although a vast extent has been dug over through

all this district, nothing like a continued vein has yet been found. At a depth of nearly eighty feet, to which Mr. Austin sunk a shaft, a vein was found which seemed to have more resemblance to those continued veins or *matrices* of ore, where, in the language of mineralogists, the ore is *in situ*, or in place. But the water came in upon this digging, and it was abandoned. Of all the immense amounts of lead that have been smelted here, the ore has hitherto been found in detached masses, not *in situ*; and apparently transported there by some inexplicable and prodigious changes that have changed the structure of the earth in all this region. These masses are found with every degree of dip to the horizon, and from two to twenty feet below the surface. The operative miners lease a certain tract of land, which is staked out to them. They fall to digging upon this spot. Sometimes a single man will dig a ton of ore in a day; and again he will dig a week without lighting upon a single pound. The digging itself is a species of gambling, and there are few miners who are not steadily addicted to this practice. Immorality is naturally inspired by the pursuit, so like gambling itself, and by all that is seen or felt in example. Few attempts have yet been made to mine upon scientific principles. Adventurers go as fancy directs them. There are creeds of mineralogy peculiar to these wild people; and not a few believe implicitly in *bletonism*, or the mysteries of the divining rod. Some who have long resided here, and observed keenly and noted the circumstances that usually accompany the finding of ore, have acquired a great fund of practical knowledge upon the subject. Discoveries are continually making, and the adventurers flock from one place to another, according as the fame of recent success has blazoned it. The names of the principal diggings are as follow: Barton, Shibboleth, Lebaum's, Old Mines, Bryan's, Pratt's, Robbins', Astraddle, La Motte, a Joe, Renault's, New Diggings, Liberty, Canon's, Silver's, A. Martin, &c. The business of digging has increased and diminished many times, according to the changing circumstances of the country. Fifty diggings are occupied. Something more than 3,000,000 pounds are annually smelted, giving employment to nearly 1,200 hands. The ore is principally of that class called *galena*, and is very rich, yielding from 75 to 80 per cent. So much lead remains in the slag, that there are people who purchase it to smelt it anew. A considerable portion of arsenic is driven from the lead while it is smelting. The fumes of the smelting masses of ore are poisonous; and cattle die from licking the *slag* that is thrown out. In digging the lead ore, zinc, calamine, and manganese, are dug with it, and are thrown by as useless. Barytes is also common among the lead ore. Its great specific gravity, its whiteness and susceptibility of being ground to an impalpable powder, render it a valuable addition to white lead. The

quality of the paint is supposed to be improved by the addition. The manufacture of red lead has been attempted. But the making of white lead, or even sheet lead, has not been carried to any extent. Shot towers are erected at Herculanum and at other places; and great quantities are exported. The mine country is remarkable for its salubrity, the number of its sites for water mills, the fertility of its soil, and the enterprise of its farmers. No part of the country west of the Mississippi, so earnestly invites manufactures, especially those of lead. Those of iron have been commenced on a large scale. These mines, if worked to the extent of which they are capable, would not only supply lead enough for the United States, but for the world. The country where the diggings have been made, exhibits a curious spectacle. Coarse and dilapidated air furnaces, immense piles of slags, and all the accompaniments of smelting, show in how many deserted places these operations have been performed. The earth thrown up in the diggings contains portions of oxidized minerals, and acquires in the air a brilliant reddish hue; and the numberless excavations have the appearance of being graves for giants. It is an hundred years since the French began to dig lead ore in this region. Salt is made in large quantities at Boone's Lick, near St. Genevieve, and Herculanum.

Rivers. This state takes its name from the Missouri, which empties into the Mississippi on its eastern limit. This is by far the largest tributary of the Mississippi, bringing down more water than the upper Mississippi itself. In fact, it is a longer river than the Mississippi, from its farthest source to the Mexican gulf. There are many circumstances which render it one of the most interesting rivers, and it is clearly the longest tributary stream on the globe. Many have thought that from its length, the amount of its waters, and the circumstance of its communicating its own character, in every respect, to the Mississippi below the junction, it ought to have been considered the main river, and to have continued to bear its own name to the sea. In opposition to this claim, we remark, that the valley of the Missouri seems, in the grand scale of conformation, to be secondary to the Mississippi. The Missouri has not the general direction of that river, which it joins nearly at right angles. The valley of the Mississippi is wider than that of the Missouri, and the river is broader. The course of the river and the direction of the valley are the same above and below the junction of the Missouri. From these and many other considerations, the 'father of waters' seems fairly entitled to his name.

The Missouri has a course of between four and five hundred miles in this state, and the whole of the remainder in the territory of Missouri. It seems proper, therefore, that we should give a general description of

this river, as belonging to this state. Its prodigious length of course, its uncommon turbidness, its impetuous and wild character, and the singular country through which it runs, impart to it a natural grandeur belonging to the sublime. We have never crossed it without experiencing a feeling of that sort, nor without a stretch of the imagination to trace it along its immense distances through its distant regions, to the lonely and stupendous mountains from which it springs.

It rises in the Rocky mountains, nearly in the same parallel with the Mississippi. The most authentic information of the sources of this mighty river, is from its first intrepid American discoverers, Lewis and Clark. What may properly be called the Missouri, seems to be formed by three considerable branches, which unite not far from the bases of the principal ranges of the mountains. To the northern they gave the name of Jefferson, to the middle, Gallatin, and to the southern, Madison. Each of these branches fork again into a number of small mountain streams. It is but a short distance from some of these to the head waters of the Columbia, on the other side of the mountains. A person may drink from the spring sources of each, without travelling more than a mile. After this junction, the river continues a considerable distance to be still a foaming mountain torrent. It then spreads into a broad and comparatively gentle stream, full of islands. Precipitous peaks of blackish rock, frown over the river in perpendicular elevations of 1,000 feet. The mountains, whose bases it sweeps, are covered with terebinthines, such as pines, cedars, and firs; and mountain sheep are seen bounding on their summits, where they are apparently inaccessible. In this distance, the mountains have an aspect of inexpressible loneliness and grandeur.

The river then becomes almost a continued cataract for a distance of about seventeen miles. In this distance, its perpendicular descent is 362 feet. The first fall is 98 feet; the second, 19; the third, 47; the fourth, 26. It continues rapid for a long distance beyond. Not far below these falls, enters Maria's river from the north. This is a very considerable stream. Still farther down, on the opposite side, enter Dearborn and Fancy, each about 150 yards wide. Maules, 100; Big Horn, 100; Muscle Shell, 100; Big Dry, 400; Dry, 100; Porcupine, 112; all these enter from the south side. Below these enters the Roche Jaune or Yellow Stone, probably the largest tributary of the Missouri. It rises in the same ranges of mountains with the main river, and has many points of resemblance to it. It enters from the south, by a mouth 850 yards wide. It is a broad, deep, and sweeping river; and at its junction, appears the largest of the two. Its course is commonly calculated at 1,600 miles. But the sizes and lengths of all these tributaries are probably overrated.

Its shores, for a long distance above its entrance, are heavily timbered, and its bottoms wide and of the finest soil. Its entrance is deemed to be 1,880 miles above the mouth of the Missouri, and was selected by the government as an eligible situation for a military post, and an extensive settlement. White bears, elk, and mountain sheep, are the principal animals seen along this part of the river.

At the point of junction with the Yellow Stone, the Missouri has wide and fine bottoms. Unfortunately, its banks are for the most part destitute of timber, and this, for a long series of years, will prevent its capacity for habitation. White Earth river, from the north, is a small stream. Goose river, 300 yards wide, comes in from the south side. Little Missouri is shallow and rapid, and is about 130 yards wide. Knife river comes in from the south side, just above the Mandan villages. Cannon Ball river enters from the south side, and is 140 yards wide. Winnipenhu, south side. Sewarserna, south side. Chienne is represented to be boatable nearly 800 miles, and enters from the south side by a mouth 400 yards wide; Tyber's river enters from the same side. White river, boatable 600 miles, south side, is a very beautiful stream, and has a mouth 300 yards wide. Poncas, south side. QuF-Courre, a fine stream, with a short course, south side, and Riviere, a *Jaque*, a noted resort for traders and trappers; White Stone, Big Sioux, and Floyd's rivers. La Platte enters from the south, and has a longer course than any other river of the Missouri. It rises in the same ranges of mountains with the parent stream, and measured by its meanders, is supposed to have a course of 2,000 miles before it joins that river. It is nearly a mile in width at its entrance; but is, as its name imports, shallow, and not boatable except at its highest flood. Nodawa, north side. Little Platte, north side. Kansas is a large tributary from the south, has a course of 1,200 miles, and is boatable most of the distance. Blue Water, and two or three small streams below, come in on the south side. Grand river is a large, long, and deep stream, boatable for a great distance, and enters on the north side. The Charatons come in on the same side. The La Mine enters on the south side. Bonne Femme and Manitou enter on the north side, and Salt river on the south.

The Osage, which enters on the south side, is a large and very important stream of the Missouri, boatable 660 miles, and interlocks with the waters of the Arkansas. Three or four inconsiderable streams enter on the opposite side, as Miry, Otter, and Cedar rivers. On the south side enters the Gasconade, boatable for 66 miles, and is important for having on its banks extensive pine forests, from which the great supply of plank and timber of that kind is brought to St. Charles and St. Louis. On the south side, below the Gasconade, are a number of inconsiderable rivers,

as Buffalo, St. John's, Wood river, and Bonhomme; and on the other side, the Charette, Femme Osage, and one or two other small branches, before it precipitates itself into the Mississippi.

The bottoms of this river have a character very distinguishable from those of the upper Mississippi. They are higher, not so wet, more sandy, with trees which are not so large, but taller and straighter. Its alluvions something narrower; that is to say, having for the first five hundred miles a medial width of something more than four miles. Its bluffs, like those of the other river, are generally lime stone, but not so perpendicular, and have more tendency to run into the *mamelle* form. The bottoms abound with deer, turkeys, and small game. The river seldom overflows any part of its banks in this distance. It is little inclined to be swampy. There are much fewer lakes, bayous, and small ponds, than along the Mississippi. Prairies are scarcely seen on the banks of the river, within the distance of the first four hundred miles of its course. They are heavily timbered, and yet, from the softness of the wood, easily cleared. The water, though uncommonly turbid with a whitish earth, which it holds in suspension, soon and easily settles, and is then remarkably pure, pleasant, and healthy. The river is so rapid and sweeping in its course, and its bed is composed of such masses of sand, that it is continually shifting its sand bars. A chart of the river, as it runs this year, gives little ground for calculation in navigating it the next. It has numerous islands, and generally near them is the most difficult to be stemmed. Still more than the Mississippi below its mouth, it tears up in one place, and deposits in another; and makes more powerful and frequent changes in its channel, than any other western river.

Its bottoms are considerably settled for a distance of four hundred miles above its mouth. That of Charaton is the highest compact settlement. But the largest and most populous settlement in the state, is that called Boone's Lick or Franklin county. Indeed, there are American settlers, here and there, on the bottoms above Platte, and far beyond the limits of the state of Missouri. Above the Platte, the open and prairie character of the country begins to develop. The prairies come quite in to the banks of the river, and stretch from it indefinitely, in naked grass plains, where the traveller may wander for days without seeing either wood or water. The 'Council Bluffs' are an important military station, about six hundred miles up the Missouri. Beyond this point, commences a country of great interest and grandeur, and denominated, by way of eminence, the Upper Missouri. The country is composed of vast and almost boundless grass plains, through which stretch the Platte, the Yellow Stone, and the other rivers of this ocean of grass. The savages of this region have a peculiar physiognomy and modes of life. It is a coun-

try where commence new tribes of plants. It is the home of buffaloes, elk, white bears, antelopes, and mountain sheep. Sometimes the river washes the bases of the dark hill of a friable and crumbling soil. Here are found, as Lewis and Clark, and other respectable travellers relate, large and singular petrifications, both animal and vegetable. On the top of one of these hills, they found the petrified skeleton of a huge fish, forty-five feet in length. The herds of the gregarious animals, particularly the buffaloes, are innumerable. Such is the general character of the country, until we come in contact with the spurs of the Rocky mountains.

As far as the limits of the state, this river is capable of supporting a dense population for a considerable distance from its banks. Above those limits, it is generally too destitute of wood to become habitable by any other people than hunters and shepherds. All the great tributaries of this river are copies, more or less exact, of the parent stream. One general remark applies to the whole country. The rivers have narrow margins of fertility. The country, as it recedes from the river, becomes more and more arid, sandy, and destitute of water, until it approximates in character the sandy deserts of Arabia.

The Osage is one of the principal tributaries of the Missouri in this state. It comes in on the south side of the Missouri, one hundred and thirty miles above its junction with the Mississippi. At its mouth it is nearly four hundred yards wide. Its general course is from south to north; and the best cotton country in the state of Missouri is on its head waters. Its principal branches are Mary's, Big Bone, Yungar, Potato, and Grand Fork rivers. Yungar is nearly as large as the parent stream, and is navigable for small crafts, except at its grand cascade, for nearly an hundred miles. The cascade is a great cataract of ninety feet fall. When the river is full, the roar is heard far through the desert. It is a fine country through which the river runs. The banks are timbered, and abound with game, particularly bears. An interesting missionary station is situated on its waters. This station is under the care of the 'American Board of Foreign Missions,' and has many Indian children in its school, and is in a flourishing condition. The Maramec is a beautiful river, which runs through the mineral region, and enters the Mississippi eighteen miles below St. Louis. It is between two and three hundred yards wide at its mouth, and boatable in time of high water two hundred miles. Big river, Bourbon, and Negro Fork are branches of this river, which in their turn are fed by numerous mountain streams. Bonhomme is an inconsiderable stream, and enters the Missouri twenty-eight miles above its mouth. We have already named the Gasconade, so important to this country from the supplies of pine plank and lumber, with which it furnishes the country below it. There is a great number

of considerable streams, which enters the Missouri and the Mississippi from the south, whose names we have already mentioned. The principal are the Swashing, Gabourie, Saline, and Apple creek. St. Francis and White river, with their numerous branches, rise in this state. Above St. Louis, on the eastern limits of the state, a number of considerable rivers enter the upper Mississippi, as Dardenne, Cuivre, Salt river, and Two rivers. Of these, Salt river is the most considerable, having a boatable course of forty or fifty miles. This river waters as fine a tract of country as any in the state. The lands are also excellent about Two rivers. There are fifty other streams in the state, that in the winter carry considerable water, and in summer become dry. This circumstance, common to the smaller streams over all the west, is peculiarly so here, where the intense ardor of the summer's sun, the sandy nature of the soil, the unfrequency of summer rains, the dryness of the atmosphere, and the untimbered and open face of the country, all conspire to dry up all streams but those that are supplied by perennial springs, or by continued ranges of high hills. From this cause, and from the levelness of the general face of the country, mill seats commanding a lasting water power are uncommon. It is well known, that western husbandmen universally prefer a spring to a well, where they can obtain the one or the other. It is considered an essential requisite in the capability of a tract of land to be settled, that it should have a spring on it. There are, however, large tracts of the richest land in this state so level as to be incapable of springs; and here the farmers are obliged to resort to wells.

Game, &c. The hunter will find in no country a finer field for his pursuits. In the unsettled parts, bears are still sufficiently common to be hunted as an employment. The oil of the bear is an article of extensive culinary use. Deer are, in some places, almost as numerous as the domestic cattle. Wild turkeys furnish admirable sport to the gunner. In the last of autumn and the first of winter, prairie hens are seen in flocks. Partridges are frequent all the year. Squirrels, ground-hogs, woodchucks, and raccoons abound. Wolves, panthers, and wild cats are but too common. In all the considerable rivers fish are abundant. But they are generally large, coarse, and of an inferior quality.

Chief Towns. St. Louis is the commercial capital of Missouri, and the largest town west of the Mississippi. It is situated eighteen miles below the mouth of the Missouri, between thirty and forty below the mouth of the Illinois, and nearly two hundred above the mouth of the Ohio. Nature seldom offers a more delightful site for a town. In many respects it resembles that of Albany in New York. It is on a kind of second bottom, that rises gently from the water to a second bank. The ascent to this is not at all precipitous. Having surmounted this bank,

an extensive plain opens to view. In the immediate vicinity of the town, this plain is covered with bushes and shrub oaks. Beyond is an extensive belt of grassy plain, or naked prairie. The timber within nine or ten miles has been cut away for fuel. In summer, the eye reposes with pleasure upon this sweep of vorduro, bounded on the verge of the horizon with forests. But in winter the prospect is bleak and desolate. The eye always dwells with delight upon the level bottom and the noble forest upon the opposite shore of the river. In 1814 there were but few American houses in the place. There were a few stone houses covered with plaster. The circular stone-forts beyond the town, white with plaster and the hoariness of age, together with the whiteness of houses in general, from the French fashion of annual white-washing, gave the town a romantic and imposing appearance, when seen from a distance. With the exception of two or three aristocratic establishments, when contemplated near at hand, the houses were mean, frail, and uncomfortable establishments. The streets were narrow and dirty, and it was in fact a disagreeable town. A new impulse was given to the town by American laws, enterprise, and occupancy. Most of the houses that have been added within the last ten years, have been of brick or stone. Some of the public buildings are handsome. There are two respectable protestant churches. The catholic cathedral was intended to be a magnificent structure. It is not yet completed. A spacious town house is a great ornament to the city. The town has extended itself along the hill, and some of the best houses are on that delightful elevation. The houses, in 1820, were reckoned at more than six hundred. By the census of 1830, it contained 2,503 free males; 1,880 free females; 1,668 slaves; 287 free persons of color. Total, 6,694. The town was then stationary, or perhaps retrograde. But since that time the lead business has been reanimated by a protecting duty upon foreign lead. The fur trade has received a new impulse. The town has recovered from the shock caused by the failure of its banks. It has at present a branch of the United States bank. A healthy circulation has been restored, and the town is now rapidly increasing in business and population. In the year 1818, one hundred houses were added to the place. The principal street is more than a mile in length. Three or four gazettes are printed here. There is an academy, a catholic seminary, and a number of respectable schools. The French have communicated to the people a taste for gardening; and there are a number of very handsome gardens in and about the town. Very few towns in the United States, or the world, have a more mixed population. Among the original population, there is no inconsiderable sprinkling of Indian blood. The American population predominates over the French, and is made up of immigrants from all the states. It is a

central point in the Mississippi valley for immigrants and adventurers of every character. Making due allowance for this circumstance, the people are generally quiet and decent in their manners. Many adventurers come here, and find themselves in a position to claim a standing in society which they have not been accustomed to possess. Hence the occasions for broils, from supposed neglect, contempt, or questioning of character, are numerous; and fatal recontres, denominated 'affairs of honor,' are a bloody stain upon the character of the place. There is a Presbyterian, Baptist, Methodist and Catholic society in the town; and the institutions of religion are beginning to have considerable effect upon the manners and moral character of the people. Whoever observes the position of this town on the map, will see that it is very favorably situated to become a town of supply of merchandise to a vast tract of country. In the centre of the Mississippi valley, commanding the trade of the Missouri, the upper Mississippi, and the Illinois, the capital of a very extensive fur trade, and the depot for as rich lead mines as are in the world, it must necessarily become a large town. It has one obvious advantage over any town on the Ohio. Steam boats can come to St. Louis from New Orleans in the lowest stages of water. It is very common for travellers from the Atlantic country, who are bound in the autumn to New Orleans, to take passage from Cincinnati across the country to St. Louis, in order to avail themselves of the advantage of a direct passage to New Orleans in a steam boat. The lowness of the water in the Ohio, and the difficulty of passing over the falls at Louisville, render a direct steam boat passage from Cincinnati to New Orleans, at that season of the year, an uncommon occurrence. A great number of keel boats, and river crafts of all descriptions, bound to all points of the boatable waters of the Mississippi, are seen at all seasons lying in the harbor at St. Louis. Miners, trappers, hunters, adventurers, immigrants, and people of all characters and languages, with all kinds of views and objects, meet here, and in pursuit of their various projects scatter hence to the remotest points of the valley. The moral character of this town, so rapidly approaching the rank and consequence of a city, is rising. It still furnishes a temporary home to desperate and abandoned characters, who hope, in crossing the Mississippi, to fly beyond law and conscience. The character of the permanent inhabitants is respectable. Good regulations of every sort are advancing. The Sabbath is respected; and a wholesome police is establishing. Such a stream of immigrants is continually pouring in, and the people have so learned the habit of distrust, that hospitality to strangers is not a characteristic of the people.

St. Genevieve is situated at the upper extremity of a beautiful alluvial prairie, about a mile west of the Mississippi. It is built on the Gabourie,

a small creek which is occasionally boatable. The town contains a Catholic church, some neat French houses, a great many indifferent ones, and but few American establishments. The situation of the village is happy. Much lead is brought here for exportation; and yet the town does not appear to thrive, not possessing more inhabitants than it did thirty years ago. The present number is about 1,500. The prairie below the town is of extreme fertility, containing 6,000 acres, fenced and cultivated in common. On the hill west of the town, is a handsome building erected for an academy. From this place, is a magnificent view of the village, the bluffs above, the prairie below, and the Mississippi sweeping along in the distance. The Catholic worship is the prevailing one, and the inhabitants are principally French.

Jackson, the county town of Cape Girardeau county, twelve miles west of the Mississippi, is a respectable village, containing 100 houses, some of them handsomely built of brick. It is in the centre of one of the most populous and thriving counties in the state.

Cape Girardeau is on a beautiful bluff on the Mississippi, fifty miles above the mouth of the Ohio. It has a fine harbor for boats, and commands a noble view of the river above and below. It exhibits symptoms of decay. About this town, that beautiful tree, called yellow poplar, or *tulipifera liriiodendron*, attains its utmost development. Potosi is the county town of Washington, and the centre of the mine district. It is situated in a pleasant valley, surrounded by hills, sixty-five miles southwest from St. Louis, and forty-five west from St. Genevieve. St. Michael is an old French village among the mines. There are a number of other small villages in the mine district. Herculanum is situated on the west bank of the Mississippi, thirty miles below St. Louis, on a narrow alluvial plain, hemmed in on all sides but the river, by high and romantic bluffs, rendered still more imposing by a number of shot towers placed on their summits. This is the chief place of deposit for the lead of the lead mines. New Madrid is situated on the Mississippi, fifty miles below the mouth of the Ohio. This small village was once much more considerable than it now is. It is memorable for the romantic history of its origin under General Morgan, in the times of the Spanish regime, and for the terrible earthquakes which it experienced in 1811 and 1812. These earthquakes were more severe than any on the records of our part of the continent. The western country was shook in every direction. Thousands of acres were sunk, and multitudes of lakes and ponds were created. The church yard of this village, with all its sleeping tenants, was precipitated into the river. The trees lashed together, were thrown down, or bent in every direction. The earth burst, in what were called sand blows. Earth, sand, and water, were thrown up to great

heights in the air. The river was dammed up and flowed backwards. Birds descended from the air and took shelter in the bosoms of people that were passing. The whole country was inundated. A great number of boats, passing on the river, were sunk. One or two that were fastened to islands, were sunk with the islands. The country was but sparsely peopled, and most of the buildings, fortunately, were cabins or of logs; and from these circumstances, few people perished. No country can recount a history of earthquakes, attended with more terrific circumstances of commotion in the elements, and threatening more exterminating war with man and nature, than this. The thriving country about this village was desolated; and as the earthquakes continued in gentler shocks, and have not ceased even to this time, there seemed to be good reason for abandoning the country. The people are becoming more assured with respect to the future, and New Madrid is gradually emerging from its prostration.

There is a large and fine tract of alluvial and prairie country back of this village. The Big Prairie, about twelve miles distant, is a charming spot for farmers. But from the number of lakes, created by the earthquake, and from the extent of the swampy and inundated country in its vicinity, the country about New Madrid has the reputation of being unhealthy. A bayou, that enters the river just above the village, creates a great eddy and an admirable harbor; and New Madrid is, next to Natchez, the most noted landing place for boats on the Mississippi above New Orleans.

St. Charles, on the Missouri, is a pleasant village of about 1,200 inhabitants. There is one long street, on which are a number of handsome brick buildings. It is situated twenty miles above the mouth of the Missouri, and the same distance north-west of St. Louis. The banks between the village and the river are of solid lime stone; and above the village we ascend by a moderate acclivity to a beautiful plateau of great extent. These bluffs command a noble view of the Missouri and its islands. Back of the village, is a large extent of level country, covered with hazle copses, yielding abundance of wild hops, grapes, and prairie plums. Two miles below the town, opens the beautiful Point Prairie. We know of no place in the western country, that has a more interesting country adjoining it, than this village. There is a protestant and a catholic church here. It was for a number of years the political metropolis of the state. There are fine farms in the vicinity, and the inhabitants are noted for their sober and orderly habits. About one third of them are French. Carondelet is a small French village, six miles below St. Louis. Many of the garden vegetables sold in St. Louis market, are raised here. Troy, Louisianaville, and Petersburg, are small villages

on the upper Mississippi and its waters. Jefferson, a new town above the mouth of the Osage, on the south side of the Missouri, since the seat of government was removed there, has become the position of the public buildings; but not being a fortunate selection, has not greatly prospered. Franklin is situated on the north bank of the Missouri, one hundred and fifty miles by land above St. Louis, and more than two hundred by the river. It is estimated to contain over two hundred houses; and about 1,200 inhabitants. It is surrounded by the largest body of rich land in the state; and is the centre of a populous region of rich and respectable farmers. Booneville, opposite Franklin, on the other side of the Missouri, was originally settled by Col. Boone, the patriarch of Kentucky. Charleston is a small village at the mouth of a river of the same name. Bluffton is a village upon the same side of the river, and still higher on it, being in fact, but a little distance within the western territorial limits of the state.

Constitution, Laws, &c. This state adopted her constitution, and was admitted into the union in 1820. In its general features it resembles those of the other states. The senators are elected for four years, and the representatives for two. The governor is elected for four years. The judiciary is vested in a supreme court, a chancellor's court, and circuit and other subordinate courts, the judges of which hold their offices during good behaviour. Every free citizen who has resided a year in the state, and the last three months preceding the election, in the district, is entitled to his vote in that district. It is well known, that the article which allowed slavery in the constitution, was long and bitterly contested in the national legislature.

Manners, &c. The same provisions are made for education, as in most of the other western states. In the towns and villages, there are respectable schools; and the people generally are impressed with the importance and necessity of educating their children. But there are too many rude and ignorant people here, as in all the western country, who affirm that they have been enabled to go through life comfortably without education, and that their children are as able to do so as they were. There are schools, dignified with the name of academies, in different parts of the state. The Catholics have two or three establishments of *religious*, who receive young ladies for instruction. There is a theological school of some distinction in the barrens below St. Genevieve, for the preparation of Catholic *cleres* for the ministry. In St. Louis, society exhibits the same aspect as in other towns of a like size in the United States. It must be admitted, that in the interior, there is a perceptible shade of the roughness of people, who are far removed from the bosom of society. The roughness of the backwoodsmen is often, however, accom-

panied with an open hospitality, an honest simplicity, a genuine kindness of heart, which render a residence among them quite as pleasant as in those regions where observance and public opinion have created a greater degree of apparent refinement. It might be expected, that a country almost boundless, with few barriers of law, or local limits of habitancy and property, an extent of nearly one thousand leagues towards the western sea, would be the natural resort of wild and adventurous spirits, whose object was, as they often express it, to fly '*beyond Sabbath*.' It is so in fact. But there is more order and quietness, regulated society, and correct public opinion, than in such a state of things we should have a right to expect. There is an increasing number of religious societies, among which the Methodists are the most numerous. The Presbyterians and Baptists have also many congregations and churches. The Cumberland Presbyterians are making considerable progress. The French and Irish people are for the most part Catholics. The number of Catholic congregations, probably, exceeds that of any particular denomination of the protestants. The spirit of religious tolerance prevails to an excellent degree. Neighbors and relatives worship in churches of different denominations, without disturbing the intercourse of common life.

The French of this country have their characteristic national manners, and are the same gay and happy people. Those among them that have standing, wealth, and education, show no other differences of character from the same classes of other nations, except such as result from their national temperament and manners. The poorer French have an unique and peculiar character. They were born in the woods, or at least, far from society. They have been accustomed from infancy rather to the life of huntsmen, trappers, and boatmen, than of husbandmen. They generally make indifferent farmers. Their cabin, indeed, shows well at a distance, and the mud daubing is carefully white washed. They have gardens neatly laid out, and kept clean of weeds. Beyond this, the establishments of the *petits paysans* are generally sterile and comfortless. Their ancestors were accustomed to continual intercourse with the savages, and in habits of travelling many hundred leagues from their habitations in canoes, or on the banks of the streams, to hunt, procure furs and honey, or to traffic with the Indians. They were accustomed to the prompt and despotic mandate of a commandant. They were prepared to entertain but very inadequate ideas of the inestimable value of the mild, but protracted dispensation of justice in our courts. They regarded our laws as a bottomless gulf; and had, for a long time after they came under our government, a salutary dread of a *proces*, which had a happy influence to deter them from litigation. Familiarity with our decisions has gradually lessened this dread; and when they once acquire a passion for litiga-

tion, they are more keen in pursuit of their object than the Americans. It is an unpleasant reflection, that while we have given them political consideration, and learned them the value of land, and the necessity of cultivation, the comforts of municipal life, and the importance of education, we have also communicated to them a passion for litigation, and a fondness for ardent spirits. They are intermarrying and amalgamating with the Anglo-Americans. But even yet, on entering a village composed of equal divisions of French and American population, the French are seen as a distinct people, by their stature, gait, complexion, houses, and the appearance of their children. They are smaller in stature, have a different costume, walk quicker, have more meagre forms, and more tanned and sallow complexions. They bow with more grace, are more fluent in conversation, and these are universal traits. The Kentuckian who lives beside them, is heavier, has a rounder and fuller face, a more clear and ruddy complexion, bows less gracefully, or perhaps not at all. He pays no compliments. But we place greater reliance upon his word and the sincerity of his friendship. The wives of the French of this class are accustomed to more drudgery and submission than those of their American neighbors, and there is a nearer assimilation to Indian thoughts and habits than there is in our people. They are slow in adopting our improvements in dress, agriculture, and all that concerns their domestic establishment. They are strongly attached to the ways of their forefathers; and are generally bigotted Catholics. They have the national *gaiete du cœur*, the French enviable cheerfulness, under all circumstances. They are generally temperate and sober; and from their manner of life better calculated to endure the extremes of heat and cold than the Americans. They support the vicissitudes of climate better, and are not so much exposed to diseases of the country. They make excellent boatmen, huntsmen, and *coureurs du bois*. Their fondness for conversation and *tracasserie*, prevents their living in detached and solitary houses like the Americans, and they generally fix themselves in compact villages.

The Catholic worship has the same hold of their affections, which it had of the hearts of their forefathers, two centuries ago. Their veneration for their priests is unlimited, and the latter dare rely upon a credulity, which, in other Catholic countries, has long since passed away. For instance, they had, not many years since, processions to pray the Mississippi down, when it threatened a desolating inundation, and to banish the locusts by the intercession of the saints. So firmly are they fixed in their religious opinions, that they are apt to regard protestant efforts to convert them, not as arrogant only, but impious. To all attempts which protestant missionaries have made to change them to our faith, they find a reply, but too unanswerable, in the dissipated and immoral life of their protestant neighbors.

History. The general annals of upper Louisiana have already been given. St. Louis was founded in 1764, by Pierre Laclade, Maxon, and company. The principal inhabitants were from Canada. It was conceived to be a favorable point for concentrating the fur and Indian trade of the upper and lower Missouri and Mississippi. Among the first and most respectable settlers was M. Choteau, a name still respectable in the country. In 1776 this village received a large accession of inhabitants from the opposite shore of the Mississippi, of people who preferred the regime of Spain to England. Hunting, trapping, and trading with the Indians, was the great business of the country. Spain expended great sums of money in the country, and drew little or nothing from it. Those who chose to immigrate there, could obtain a settlement right of six hundred and forty acres for a trifling *douceur* to the commandant, and, provided they yielded a decent observance to the existing institutions of the country, the Spanish yoke sat very lightly on their shoulders. There were few countries in which the people lived more happily, and to their own minds, than this, until the attack from Michilimackinac, called in the annals of French tradition, *l'annee du coup*. After the attack, St. Louis was fortified with those circular stone bastions that at present give the town such a picturesque appearance in the distance. From St. Louis the French hive swarmed to Carondelet, St. Ferdinand, St. Charles, Mine a Burton, St. Michael's, *Cote sans dessein*, and French trading and hunting establishments were made almost to the bases of the Rocky mountains. The country continued gradually to settle, until, as has been related, it passed under the American government. The proudest eulogium that ever was uttered upon that government, was the immediate rise in the value of lands, consequent upon this transaction. French people, who were in the habit of complaining of this transfer, and of our laws, were not the less willing to take advantage of the immediate and triple value which their lands acquired. The settlement rights, which had been acquired under the Spanish regime almost for asking, became at once a competent fortune to their owners. Immigration was discouraged by the sickly season of 1811, commonly called the 'year of waters.' The late war, too, effectually repressed the increase of the country. Many settlements, as those of Boone's Lick and Salt river, were broken up. The French seemed, in many instances, rather disposed to take part with the Indians. But in the progress of the war, the indiscriminate savage appetite for slaughter finally impelled the savages to commit murders in the French villages; and this circumstance induced a hearty co-operation with the other population in punishing savage aggressions. There had been a great number of murders committed upon the inhabitants of the remote and unprotected settlements. A considerable force, denominated 'rangers,' was raised

in the territory. They marched promptly into the Indian country, and conducted gallantly; and although they had few opportunities of distinguishing themselves, by coming in actual contact with the enemy, this expedition had a great effect in awing and repressing the savage marauders on the frontiers.

The tide of immigration, which had been arrested during the war, set with greater strength towards this country on the return of peace. The mass of immigrants was constantly accumulating until the year 1817, when it seems to have reached its height. An hundred persons have been numbered in a day, passing through St. Charles, either to Boone's Lick or Salt river.

Up to this time, the march of improvement in Missouri was rapid. The face of the country was visibly changing under the eye. St. Louis was built up with houses which would not have disgraced Philadelphia. St. Charles, and the villages generally, began to be rebuilt of brick. Fine houses arose in the country. Tread mills and steam mills were erected. Schools were established; and important manufactories were either commenced or in prospect. The rage for speculation in lands became a *mania*, which affected the country. The militia made progress in organization. The population was supposed to amount to 60,000.

A sudden change, operating re-action with more or less force through the whole United States, was visible here about the year 1817, and went on increasing four or five years. It resulted from the sudden reduction of prices in the Atlantic country, the pressure of the times, and the sudden failure of the numerous banks of the western country.

There was probably no part of the United States more severely pressed than Missouri and Illinois. Improvements of every sort not only came to a dead pause, but seemed to retrograde. A great number of immigrants had been sick on removing to this new climate. Clothes, and those groceries that from habitual use had become necessities, could not be procured. Even wealthy people felt the distress of the times; for there was not sufficient money to keep up a circulating medium; They falsely imputed these evils of circumstances and the times to this particular section of the country. Many of them packed up their moveables; collected their cattle; left their farms unsold; and returned to the countries whence they had emigrated.

Others deemed that a part of these evils resulted from their being in a territorial government. It appeared by the census, that the state had more inhabitants than were required by the constitution to form a state. Delegates were accordingly chosen in 1819 for this purpose. The great object in the canvass, that preceded the election, was to prevent any person from being returned, who was adverse to its becoming a slave-holding

state. The slave question was discussed with an asperity that might naturally be expected to result from the character of the inhabitants, and the magnitude of the interests involved in the question. By a very large majority, the allowance to hold slaves was incorporated in the provisions of the constitution. It also contained an article interdicting ministers of the gospel from being eligible to any office in the state. We need not repeat, that the asperity with which the slave question was discussed was transferred to the national legislature, and was canvassed there with more bitterness than even here. But the provision finally prevailed, and this state was admitted in 1820 into the union, with the privilege of holding slaves.

No political event of a striking character has since occurred. This state continued to labor under its pecuniary embarrassments for some years. But a sound circulation of money was gradually restored. A duty placed upon imported lead gave activity to the working of the mines. The fur trade resumed its former activity. The steam boat system of freight and transport had a bearing peculiarly favorable upon the state, which has such a great length of coast washed by the Mississippi, and accessible by that species of vessels at all seasons of the year, except when the Mississippi is impeded by ice. About the year 1824, it could be discovered that the order of prosperity was advancing anew. The towns, especially St. Louis, began to improve. The tide of immigration once more set towards Missouri. It has every prospect of becoming a wealthy, populous, and powerful state.

The legislature has recently incorporated the Missouri Insurance Company, capital 100,000 dollars, and the privilege to increase it to 400,000; the St. Louis Marine Rail-way Company; the St. Louis Hospital; and the St. Louis Water Works. The water is to be raised by steam from the Mississippi and distributed over the city.

In other parts of the state, there is the Boone's Lick Manufacturing Company, near Fayette; and the Lexington Steam Saw-mill Company, in La Fayette county. There is an iron foundry establishment, on a respectable scale, at St. Louis; and one or two large establishments at Bellevue, in the mine country, that smelt their own iron from mines in the immediate vicinity. The legislature has passed an enactment to sell all the lands appropriated to the interests of education, and apply the fund thence arising to the same purpose. There are twelve colleges, academies, and seminaries, incorporated by law.

ILLINOIS.

LENGTH, 350 miles. Breadth, 180. Between 37° and $42^{\circ} 30'$ N. latitude, and $20^{\circ} 20'$ and $14^{\circ} 21'$ W. longitude. It contains 50,000 square miles, and nearly 40,000,000 acres. Bounded on the north by the North-Western territory; east by lake Michigan, Indiana, and the river Wabash; south by the Ohio, which separates it from Kentucky; and west, in its whole extent, by the Mississippi, which separates it from Missouri and the Missouri territory.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Vandalia.</i>
Adams,	Quincy,	193 miles.
Alexander,	America,	181
Bond,	Greenville,	20
Calhoun,	Gilead,	126
Clark,	Clark C. H.	134
Clay,	Maysville,	46
Clinton,	Carlyle,	30
Cole,	Cole C. H.	
Cook,	Chicago,	
Crawford,	Palestine,	118
Edgar,	Paris,	106
Edwards,	Albion,	92
Fayette,	Vandalia,	
Franklin,	Frankfort,	102
Fulton,	Fulton,	133
Gallatin,	Equality,	137
Greene,	Carrollton,	106
Hamilton,	McLeansbro',	93
Hancock,		
Henry,		

Jackson,	Brownsville,	127
Jefferson,	Mount Vernon,	65
Jo Daviess,	Galena,	326
Johnson,	Vienna,	167
Knox,	Knox C. H.	188
La Salle,	Ottawa,	
Lawrence,	Lawrenceville,	84
McLean,	Bloomington,	
Macon,	Decatur,	70
Macoupin,	Carlinville,	95
Madison,	Edwardsville,	55
Marion,	Salem,	26
McDonough,	Macomb,	
Mercer,		
Monroe,	Waterloo,	99
Montgomery,	Hillsboro',	28
Morgan,	Jacksonville,	115
Peoria,	Peoria,	43
Perry,	Pinckneyville,	129
Pike,	Atlas,	148
Pope,	Golconda,	160
Putnam,	Henepin,	
Randolph,	Kaskaskia,	59
St. Clair,	Belleville,	71
Sangamon,	Springfield,	79
Schuyler,	Rushville,	172
Shelby,	Shelbyville,	40
Tazewell,	Mackinaw,	149
Union,	Jonesboro',	154
Vermilion,	Danville,	150
Wabash,	Mount Carmel,	109
Warner,	Warren,	
Washington,	Nashville,	
Wayne,	Fairfield,	69
White,		

Vandalia is 781 miles from Washington, 75 from St. Louis, 288 from Nashville, 862 from New Orleans, 970 from New York, and 320 from Cincinnati.

The census of 1830 gives the population of Illinois as follows: Whites, 155,176. Slaves, 746. Total, 157,575.

Face of the Country. Next to Louisiana and Delaware this is the most level state in the Union; although north-west of Shawneetown

there is a range of hills, which some have chosen to denominate *mountains*. There are considerable elevations along the Illinois; and the bluffs of the Mississippi in some places might almost pass for mountains. In the mineral regions, in the north-west angle of the state, there are high hills. But the far greater proportion of the state is either distributed in vast plains, or in barrens, that are gently rolling. We may travel on the wide prairies for days without encountering an elevation that is worthy to be called a hill. In no part of the peopled divisions of the United States are there such great sections of prairie country. One prairie, with very little interruption, spreads from the shores of the Mississippi to those of lake Michigan. These prairies, more distinctly than the countries west of the Mississippi are divided into wet and dry, alluvial and rolling prairies. The wet and flat prairies seem once to have been timbered morasses. They contain peat, and other fossil indications, logs, and the bones of animals some feet below the soil, that probably when the trees and the animals fell, were on the surface. These prairies constitute the sources of many of the rivers. The alluvial prairies are high and dry; of a rich black loam, and an exceedingly fertile soil; and covered with a coarse grass of incredible size and height. The high and rolling prairies are sometimes chequered with groves of sparse trees. The quality of their soil seldom exceeds second rate, and they abound with springs. Grape vines are abundant; and they furnish an inexhaustible summer range for cattle.

This vast extent of level plains is an injury. There is often not sufficient inclination to carry off the water that falls in rains. Even the high prairies, when they happen to be of a stiff soil, are too wet for cultivation. During the heats of summer these lands discharge their waters by evaporation, rendered still more noxious by the vast quantities of vegetation which have been steeping in them. Hence it happens, that these beautiful countries to the eye, where every thing promises health, as well as abundance, are sometimes sickly.

On the route from Cincinnati to St. Louis, the great road passes through this state, in its whole extent of width. More than one hundred miles of it is high, dry, and rich prairie. In all this distance the margins of the streams are almost the only places where timbered land is found; and the streams have only narrow skirts of wood. The largest prairie is "Grand Prairie." The first stratum of soil in this wide extent of country, is a black, friable, and sandy loam, from two to five feet in thickness. The next is a red clay, mixed with fine sand, and from five to ten feet in thickness. The third is a hard blue clay of a beautiful appearance, and a greasy feeling, mixed with pebbles, and when exposed to the air, emitting a foetid smell. In this stratum the water of the wells

is found; which is disagreeable, if not unhealthy. The soil is of the first quality. In the season of flowers, the eye and all the senses receive the highest gratification. In the time of strawberries, thousands of acres are reddened with the finest quality of this delicious fruit. But this country, which strikes the eye delightfully, and has millions of acres that invite the plough, wants timber for building, fencing, and fuel. It wants good water, and in too many instances the inhabitants want health. Most of these evils will be remedied by the expedients of cultivation. Forests may soon be raised upon the prairies. Coal and peat may be discovered for fuel. Hedges and ditches may fence it; and pure water may be found by carrying the wells below the stratum of earth that is supposed to impart the sulphureous and disagreeable taste which it possesses.

Between Carlisle and St. Louis, an extent of fifty miles, we meet with woods, streams, hills, lime-stone ledges, and a rolling country; although we cross an occasional prairie quite to the American bottom. On the north of this road, and between it and the Illinois, the surface is generally more irregular. Considerable of the country may be termed broken. The hills abound with stone coal. A range of hills commences at the bluffs, that bound the American bottom near Kaskaskia, and stretches north-eastwardly through the state, towards lake Michigan. A noble lime stone bluff breaks off almost at right angles to this chain, and stretches along the margin of the American bottom, to the point nearly opposite the Missouri. This bluff has, in many places, a regular front of perpendicular lime stone, not unfrequently three hundred feet high. Another line of river bluffs commences opposite the mouth of the Missouri, and reaches the mouth of the Illinois. Opposite Portage des Sioux, these bluffs shoot up into detached points and pinnacles, which, with the hoary color of the rocks, have at a distance the appearance of the ancient spires and towers of a town. This chain of bluffs marks the limits of the alluvion of the Illinois. As along the Mississippi, the face of this grand wall of nature is frequently perpendicular. When the limits of the alluvion are marked on one side by this wall, on the opposite side they are bounded by a succession of singular hills, parallel to each other, called by the French, 'mamelles.' What is singular, is that a beautiful prairie is seen on that side which is bounded by the perpendicular bluffs, and a thick, tangled, and heavily timbered bottom on the side of the river, that is marked with these mamelles. When the prairie is found on the right or left of the river, so are all these accompaniments; and they regularly alternate, being found first on one side and then on the other.

The 'American bottom,' commences not far below Kaskaskia, and stretches along the eastern shore of the Mississippi eighty miles, termin-

ating a little distance below the point which is opposite the mouth of the Missouri. It is from three to six miles wide, and divided into two belts. The first, bordering the Mississippi, is a heavily timbered bottom. The next, reaching the foot of the perpendicular bluffs, is prairie of the richest quality, covered, in the season, with grass and flowers. Parts of this tract have been in cultivation with the exhausting crop of maize one hundred years, without apparently producing the slightest exhaustion of the soil. No description will convey an adequate idea of the power of vegetation, and the rank luxuriance with which it operates along this plain of exhaustless fertility. Unhappily, here, as almost universally, nature has compensated the prodigality of her gifts on the one hand, by counterbalancing disadvantages on the other. Wherever her bounties are offered with little labor, and in such abundance as here, men will be found. But in the autumn, you will enter few houses in the whole distance, where some of the members of the family are not sick.

A bottom similar to this, alternately on the right and left bank of the Illinois, marks its course almost from its mouth to its source. It is in the same manner bounded by bluffs. The same line of hills marks a belt beyond its bluffs. In short, this configuration of the country designates the outlines of all the rivers in the valley of the Mississippi. Each of the great rivers has some distinctive signs impressed upon its bluffs and hills.

The military bounty lands in Illinois are laid off in the delta of the Illinois and Mississippi. Their shape is that of a curvilinear triangle. More than five million acres have been surveyed, to meet the appropriation of three millions and a half acres, which were assigned by congress, as a bounty for soldiers. These lands embrace all the varieties of soil found in any part of the Mississippi valley. There are rich bottoms, inundated swamps, grassy prairies, timbered alluvions, perpendicular bluffs, 'mamelles' and river hills, barrens, and all qualities of soil from the best to the worst. Some portions may be affirmed healthy; but such is not their general character. A great share is of first rate quality, as regards fertility. The lower portion next the Mississippi, where the two rivers, for a long distance, are near each other, seldom diverging more than eight miles, is generally of extraordinary fertility; but sometimes inundated, and too often unhealthy. As we ascend the Illinois, and the two rivers diverge, the character of the country becomes more diversified, less subject to inundation, more happily sprinkled with hill, dale, copse, and prairie. The north-eastern division of this tract is in general a fine country.

It would lead to a particularity beyond our object, to go into a detailed description of all the bodies of excellent land in this state. For not only

here, but over all the western country, the lands seem to be distributed in bodies, either of rich or sterile, level or broken lands. On Rock river, the Illinois, the Kaskaskia, Embarras, between the Big and Little Wabash, on the Parashaw, the Macoupin, the Sangamon, and on all the considerable streams of this state, there are very large bodies of first rate lands. The Grand prairie, the Mound prairie, the prairie upon which the Marine settlement is fixed, and that occupied by the society of Christians from New England, are all exceedingly rich tracts.

The Sangamon, in particular, is an Arcadian region, in which nature has delighted to bring together her happiest combinations of landscape. It is generally a level country. The prairies are not so extensive as to be incapable of settlement from want of timber. The Sangamon itself is a fine boatable water of the Illinois, entering it on the south side, one hundred and forty miles above the mouth of the Illinois. All the waters that enter this beautiful river, have sandy and pebbly bottoms, and pure and transparent waters. There is a happy proportion of timbered and prairie lands. The soil is of great fertility. The climate is not very different from that of New York, and the latitude about the same. The summer range for cattle is inexhaustible. The growth of forest trees is similar to that of the rich lands in the western country in general. The proportion of locust, black walnut, and peccan trees, that indicate the richest soils, is great. Iron and copper ore, salt springs, gypsum, and stone coal are abundant. All who have visited this fine tract of country, admire the beauty of the landscape, which nature has here painted in primeval freshness. So beautiful a tract of country was early selected by immigrants from New England, New York, and North Carolina. More than two hundred families had fixed themselves here, before it was surveyed. It now constitutes a number of populous counties, and is thickly settled by thriving farmers. The first settlement of Greene county, one of the most populous, was in 1817; and the first sale of lands in 1821. It has now 7,854 inhabitants, and 1,207 militia.

A body of lands, perhaps equally extensive and fine with that on the Sangamon, lies along the course of the Kaskaskia, or Okau. This river has a long course through the central parts of the state, and a country happily diversified with hill, vale, prairie, and forest. The streams that fall into it, have sufficient fall to be favorable for the site of mills. The best settled parts of the state are watered by this river. On its banks is Kaskaskia, formerly the seat of government, and Vandalia, at present the metropolis.

Although there are extensive bodies of sterile and broken lands in Illinois, yet take the whole of its wide surface together, it contains a greater proportion of first rate land than any state in the union, and

probably as great in proportion to its extent, as any country on the globe. One of the inconveniences appended to this extent of rich country, is too great a proportion of prairies, with which two-thirds of the surface are covered. But the prevalence of coal and peat, and the ease and rapidity with which forest trees may be raised, will render even the extensive prairies habitable.

Rivers. It is only necessary to look on the map of this state, to see what astonishing advantages for inland navigation nature has given it. On its northern extent, it has for a great distance the waters of lake Michigan, and the boatable streams that empty into it; and by this vast body of waters, a communication is opened with the northern fronts of Indiana and Ohio, with New York and Canada. On the north-west frontier, it has Rock river, a long, beautiful and boatable river of the Mississippi. On the whole western front, it is washed by the Mississippi, and on its northern, by the Ohio. On the east, it is bounded by the Wabash. Through its centre, winds in one direction, the Illinois, connecting the Mississippi with lake Michigan by the Plein and Kankakee, a river, excepting a short distance of shoals, almost as uniformly boatable as a canal; and in another direction, the beautiful Kaskaskia winds through the state. Besides these, there are great numbers of boatable streams, penetrating the state in every direction. Such is the intersection of this state by these waters, that no settlement in it is far from a point of boatable communication, either with lake Michigan, the Mississippi, or the Ohio. It may be added, that when the state shall have been inhabited as it will be, as no country affords greater facilities for making canals, from the friability of the soil, its levelness, and the proximity of the sources of the boatable waters to each other, canals will complete the chain of communications, and transport will be almost as entirely by water in Illinois, as it now is in Holland or China. At present, the state is supposed to have four thousand miles of boatable waters in her limits.

The Illinois, which gives name to the state, may be considered the most important river, whose whole course is in it. It rises in the north-eastern parts of the state, not more than thirty-five miles from the south-western extremity of lake Michigan, and interlocking by a morass with the river Chicago, which empties into that lake. Its two main head branches are Plein and Kankakee. Thirty miles from the junction of these rivers, enters Fox river, from the north. Between this and the Vermillion, enter two or three inconsiderable rivers. The Vermillion is a considerable stream, which enters the Illinois from the south, two hundred and sixty miles above the Mississippi. Not far below this river, and two hundred and ten miles above the Mississippi, commences Peoria lake, which is no more than an enlargement of the river, two miles wide

on an average, and twenty miles in length. Such is the depth and regularity of the bottom, that it has no perceptible current whatever. It is a beautiful sheet of water, with romantic shores, generally bounded by prairies; and no waters in the world furnish finer sport for the angler. M'Kee's and Red Bud enter not far from this point. Crow Meadow river almost interlocks, at its source, with the Vermillion of the Wabash. Two or three inconsiderable streams enter the river from the north, not far from the lower extremity of Peoria lake. Still lower down, enters from the south Michilimackinack, a very considerable stream, boatable nearly an hundred miles from the river into the interior. Below this, enter Spoon and Crooked rivers. Still lower down, on the same side, enters the Sangamon, by a mouth one hundred yards wide, and is boatable one hundred and forty miles. From its position, and the excellence of its lands, it is one of the most important rivers of the state. Chariton, Otter, Apple, and Macoupin rivers, are all considerable streams that water fine tracts of country.

On the north side of the Illinois, the rivers that enter on that shore, have their courses, for the most part, in mountainous bluffs, which often approach near the river. For a great distance above its mouth, the river is almost as straight as a canal; has in summer scarcely a perceptible current, and the waters, though transparent, have a marshy taste to a degree to be almost unpotable. The river is wide and deep; and for the greater part of its width, is filled with aquatic weeds to such a degree that no person could swim among them. Only a few yards width in the centre of the stream is free from them. It enters the Mississippi through a deep forest, by a mouth four hundred yards wide. Perhaps no river of the western country has so fine a boatable navigation for such a great distance, or waters a richer and more luxuriant tract of country. On the banks of this river, the first French immigrants from Canada fixed themselves; and here was the scenery on which they founded their extravagant paintings of the western country. By a moderate amount of labor and expense, this river might be united with the Chicago of lake Michigan. Appropriations have already been made by the state for the canal that is intended to effectuate this purpose. We have already remarked, that at certain seasons of the year, boats of five tons burden already pass through the morass, from one extremity of which, the waters are discharged into the Chicago of lake Michigan; and from the other, into the Plein of the Illinois; thus furnishing a natural communication between two rivers, whose outlets are so wide and opposite from each other. Indeed, by the most obvious appearances along the Illinois and some of its waters, as the Plein, for example, it is manifest, that lake Michigan once discharged, at least, a part of its surplus waters into the Mississippi. This,

too, may explain the obvious appearance in that lake, of being now many feet lower than once it was. This fact is palpably marked every where along the rocky shores of the lake.

Rock river is one of the most clear and beautiful tributaries of the Mississippi. It has its source beyond the northern limits of the state, in a ridge of hills that separates between the waters of the Mississippi and lake Michigan. On its waters are extensive and rich lead mines. Its general course is south-west, and it enters the Mississippi not far above the commencement of the military bounty lands. Opposite the mouth of this river, in the Mississippi, is the beautiful island called from the name of the river, on which is a military station of the United States, presenting one of the most beautiful prospects on the whole range of the Mississippi.

Kaskaskia river rises in the interior of the state, nearly interlocking with the waters of lake Michigan. It has a course in a south-west direction of between two and three hundred miles, greater part of which is, in high stages of water, bountable. It runs through a fine and settled country, and empties into the Mississippi a few miles below the town of the same name. In its long course, it interlocks with the waters of Sangamon, St. Mary, Big Muddy, Little and Great Wabash. It receives a great number of tributaries, among which the most considerable are Crooked, Horse, Prairie, Long, Silver, Sugar, and Shoal creeks. Its lower course is known to the French people by the name of Okau.

Little Wabash rises forty miles south-east of the Kaskaskia, and runs in a southerly direction one hundred and thirty miles, emptying into the main Wabash a few miles above its junction with the Ohio. It is eighty yards wide at its mouth, and susceptible of a long navigation, when the timber shall have been removed from its bed, and some of its sand bars dug down. An appropriation has been made by the legislature for this purpose. It waters a rich country, abounding in small streams. Fox river is no more than a bayou of the Wabash. Embarras, Macontin, St. Germain, Tortue, Brouette, Dachette, Erablier, Rejoicing, and Tippicanoe, are all considerable streams of this state, which enter into the Wabash. Most of them have their sources in low prairies or marshy lakes. They abound in fish and water fowl. Tippicanoe receives its name from a kind of pike called piccanau, by the savages, which abounds in this river. It is famous for the bloody battle fought on its banks, between our troops under General Harrison, and the savages, at the commencement of the late war. As the Wabash belongs, in a great measure, to Indiana, we shall reserve a further description of it for that state. Henderson is a considerable river, entering the Mississippi two hundred and forty miles above St. Louis.

Parassaw enters the Mississippi between Portage des Sioux and the mouth of the Illinois. It has been but recently inhabited. It runs through a fine tract of land. A considerable body of Irish Catholics have fixed themselves on this creek. It has a course of nearly fifty miles. Some little distance from the mouth of the Missouri, enters into the Mississippi, Wood creek, which has a course of thirty or forty miles, and has a number of mills erected on it. Cahokia creek has a considerable length of course in the American bottom, and enters the Mississippi not far below St. Louis. Big Muddy, called by the French *A vase* or *An Vau*, enters the Mississippi thirty-two miles below the mouth of Kaskaskia. It is a deep, slow stream, carrying a great body of water, considering its width, which is not more than seventy yards. It is boatable one hundred and fifty miles. It flows through a low and level country, and some parts of its alluvion are subject to inundation. Near its banks are found immense banks of stone coal. St. Mary's is an inconsiderable stream that empties into the Mississippi a league and a half below the Kaskaskia.

The following rivers of this state empty into the Ohio. The Saline unites its waters with that river, thirty miles below the mouth of the Wabash. It is navigable to the United States saline, back of Shawneetown, twenty miles from its mouth. Grand Pierre, Lush creek, and Big Bay, are inconsiderable streams, that are useful as furnishing sites for mills. Cash is a considerable stream, boatable fifty miles, and is fifty yards wide at its mouth. It enters the Ohio five miles above its mouth.

Minerals. In the north-west angle of this state, and in the adjacent territories, are found the richest veins of lead ore, probably, in the world. The mine country, like that in Missouri, is found to be more extensive, in proportion as more researches are made. Specimens of native malleable copper are shown, weighing from one to three pounds. They were found in a hilly region, at a considerable distance east of the Mississippi; and the finder represented the region where they were found, as having the marks of volcanic explosion about it. Gypsum and mineral coal are abundant in this state, as are also salines, though we know of but one place in the state where salt is extensively made. Immense quantities of this necessary article are manufactured at the saline back of Shawneetown.

Climate. This state, in general, has the same climate with Missouri, being much more nearly assimilated, in this respect, to that state, than to Indiana or Ohio. But being something lower and more level than the Missouri country, and more subject to inundation, it is probably more humid; and at its north-eastern extremity, where it feels the bleak and desolating gale of the lakes, it is more cold, and has a more uncomfortable air in the winter. It embraces between five and six degrees of latitude.

The southern parts will bring cotton, in favorable years, for domestic use. While the climate of the northern parts is not much unlike that of New York and Albany. The productions are the same as those of the adjoining state of Missouri.

Agriculture and Manufactures. This state, having a vast extent of the most fertile soil, must of course raise with the greatest ease, all the articles to which her soil and climate are favorable, in an amount far beyond her consumption. By her long line of coast on the Mississippi, which is never hindered from being navigable, by the lowness of the waters, she has facilities for conveying her articles to market, which the states situated on the Ohio have not. From her immense prairies and boundless summer range for cattle, she has advantages for raising cattle and horses, over the other western states. Her prairies yield a variety of good fodder. In the eastern districts, in the vicinity of French, Indian, or American habitation, wherever the natural prairie grass is 'killed out,' as the phrase is, a fine species of spear grass, called blue grass, naturally takes place of it. The eastern parts of this state more easily clothe themselves with a fine and verdant turf than the more sandy soils of Missouri. These circumstances indicate this to be naturally a grazing state. It already sends great numbers of fine cattle and horses to New Orleans. Most of the clothing of the people is manufactured in the domestic way. The coarser kinds of manufactures are found at home. The number of artisans, by the census of 1820, exceeded a thousand.

Chief Towns. Vandalia has been selected as the political metropolis of this state. It is pleasantly situated, on a high bank of the Kaskaskia river, in the centre of a rich and thriving country. It was founded but a few years since; but respectable houses for the accommodation of the government and the courts have already been erected. Many handsome brick buildings have arisen. A weekly gazette is issued; and it exhibits the aspect of a respectable village, having from eighty to one hundred houses.

Edwardsville, on Cahokia creek, twenty miles north-east from St. Louis, is a county town, and a village of considerable consequence. Until within a few years it was the seat of government, which had been transferred from Kaskaskia to that place.

Belleville is in the centre of Turkey Hill Settlement, eighteen miles south-east of St. Louis, and a few miles east of the American bottom. It is a flourishing village in the midst of a compact settlement, and most excellent lands.

Alton is a new village, a little above the mouth of the Missouri. In four years from its commencement it contained one hundred houses, and a respectable boarding school. Many of the people were immigrants

from New York. From the favorableness of its position, and from the apparent healthiness of its situation, it bids fair to become a town of consequence.

Carrollton, the county town of Greene county, has a street of substantial brick houses, and six hundred inhabitants.

Carlisle is situated on the west bank of the Kaskaskia, on the great road from Cincinnati to St. Louis. The road from Shawneetown to St. Louis also passes through this place. Boats of burthen, in good stages of water, can ascend the river to this place. There are few positions in the state more central to the resources of the country.

Cahokia, on the creek of that name, is situated in the American bottom, a few miles below St. Louis. It is one of the most ancient villages in the country. Its inhabitants are chiefly French; and it is a village of considerable extent.

Prairie du Rocher, twelve miles above Kaskaskia, is a French village, in the American bottom, situated near a most beautiful limestone bluff. It is nearly the size of the former village.

Kaskaskia is situated on an extensive plain, not far from the commencement of the American bottom, eleven miles from the mouth of the river on which it stands, and six miles from the nearest point of the Mississippi. This town was one of the first establishments made by the French in the valley of the Mississippi; and is a place whose origin dates farther back than Philadelphia. It once was a place of great importance, containing seven thousand inhabitants. At present it numbers one hundred and sixty houses and one thousand inhabitants. A more beautiful situation for a town can hardly be imagined. It is in the centre of a gently sloping basin, on a fine navigable stream, and in the midst of a country proverbial for its fertility. It is the seat of justice for its county; has a bank, a printing office, a Catholic church, and a land office.

Albion is situated near *Bon Pas* creek, and is the centre of what is called the "Marine Settlement," formed by Mr. Birbeck, Flower, and other English immigrants. There are many wealthy farmers in this vicinity, that were once mariners.

Galena was first settled in 1826. It was originated by the extensive and rich lead mines in its vicinity, and was an outpost of between 3 and 400 miles advance into the wilderness, north-west of St. Louis. The population now amounts to near one thousand inhabitants. There are forty-two stores and warehouses, with an injurious excess of groceries, and about two hundred and fifty dwelling houses. There is a weekly journal, and the usual concomitants of a county seat. Fifty steam boat arrivals are the annual average for the two past years; and about ten million pounds of lead are annually exported from this place. The

population in the vicinity, is estimated at ten thousand. It is 300 miles north-west of Vandalia, and about 350 from St. Louis.

Shawneetown is situated on the Ohio, nine miles below the mouth of the Wabash. The great United States saline, situated twelve miles back of this town, contributes to give it consequence. It is the seat of justice for its county, has a bank with a large capital, and a land office. Galconda and America are inconsiderable villages on the Ohio. America, from its position, it should seem, must become one day of consequence. It is a point to which large steam boats can ascend from below, to wait for the smaller boats, that ascend the Ohio in low stages of the water. Oxford, Carmi, Palmyra, and Palestine are commencing villages on different waters of the Wabash.

Diseases, &c. The climate is so nearly the same with that of Missouri, which we have already described with some particularity, that we need add but little in this place. It is generally lower, more extensively watered, and something more humid than its sister state, opposite the Mississippi. Its diseases are similar, though we think it more subject to intermittent and remittent fevers.

In this state, as well as that, in the extensive and rich bottoms, the cows are subject to a terrible and inexplicable, or at least as yet unexplained disease, called *milk sickness*. It occurs most frequently in autumn, and about that period of autumn when the first severe frosts happen. From this circumstance, and the fact that the cattle are then driven by necessity to pasture upon the succulent vines and herbage of the forest, that remain unhurt by the frost, it is generally supposed to be occasioned by the eating of some poisonous vegetable. The animal affected with it becomes apparently weary and faint, and can travel but a little distance without falling. It seems languid and stupid, and so continues to droop until it dies. At this time, and under the influence of this sickness, the milk of the cows taken in any quantity, seems to produce the same disease in men, or whatever animals swallow it. The persons are subject to extreme nausea, faintness, vertigo, recklessness, and death. There are, probably, many supposed cases of this disease, that have an entirely different origin. Some have questioned if it be not altogether a fabulous disease. We have no doubt upon the subject. We have conversed with so many who have had it and have recovered, and have heard of so many deaths, that were well attested to have arisen from this cause, that we have no more doubt of its having affected men, than animals. It has been a subject of earnest local disputation among farmers and physicians where it occurs, and has recently been discovered to be occasioned by a luxuriant poison vine, which grows four feet in height, and is abundant in the richest bottoms.

Roads, Public Improvements, Seminaries, &c. Beside the higher schools, called academies, which have been commenced in different parts of the state, Rock Spring Theological School is a respectable Baptist endowment in the Turkey Hills Settlement, 17 miles east of St. Louis, and on the great road from that place to Vincennes. It is intended to contain a high school, an academy and theological department. The expenses of a student are not over fifty dollars a year. It has fifty students.

Illinois College, situated at Jacksonville, was founded in 1829, and has a fund of thirteen thousand dollars. It has from twenty to thirty students.

The soil in this state, as we have remarked of Missouri, in general is favorable to roads. The low and clayey prairies are exceptions. But there are vast extents of country where nature has furnished as good roads as could be desired. Some of the ferries are difficult to cross in rainy periods, from the muddiness of the approaches to them. There are considerable portions of the country where the roads are very deep and heavy in the winter. The rivers furnish most of the communications for transport. In no part of the United States would it be easier to make canals for the rest. One between the Chicago and Des Plaines, as we have seen has been contemplated. The general government has appropriated one hundred thousand acres of land to aid the project. At this time, when canals are so generally in contemplation, other routes for canals have been surveyed. The same provisions for schools have been made here, as in the other western states. In addition to a thirty-sixth of the whole of the public lands, three per cent. on all the sales of public land are added to the school fund. It is contemplated to establish an university. One-sixth part of the school funds, and two entire townships have been appropriated for this purpose. There is, in many places, a great need of primary schools; though the people display a growing sense of the vital importance of education to the well being of the state. In the more populous and opulent villages, schools are on the same footing, as in the other places similarly situated, in the United States.

Constitution and Laws. The constitution of this state was adopted in 1818. The representatives and senators are chosen biennially; the governor and lieutenant governor for four years. The judiciary is vested in a supreme court, and such other subordinate courts as the legislature may see fit to establish. The supreme court consists of a chief justice and three associate justices who hold their offices for a given time. All free white males who have resided six months within the state, are qualified to vote, and they give their votes at elections *via voce*.

History. The early history of this country has necessarily been anticipated in the general history of Louisiana. Here were the first French establishments which were made in the valley of the Mississippi. Some of the French villages date back considerably beyond an hundred years. This colony was known for a long period in the French history by the name of the Illinois. They often furnished aid from this colony to Louisiana in her wars with the Spanish and Indians. There was a time when the Illinois colony furnished, chiefly from the country about Kaskaskia, great quantities of flour and provisions to the colony of Louisiana. During the revolutionary war those French colonies were quiet for the greater part of the time. We have already related the fate of the expedition from Michilimackinack against St. Louis. In the subsequent Indian wars, this region was the theatre of many a gallant action of our partisan warriors. We have already mentioned the brilliant exploit of General Clark, in capturing a British General and detachment at Vincennes. This country suffered much from the savages during the late war. Having an immenso extent of frontier, contiguous to the lakes and to savage tribes that were under British influence, and steadily hostile to us, this was to be naturally expected. We have already narrated the bloody tragedy that ensued upon the evacuation of Fort Chicago. Many frontier settlements were broken up, and many individual murders were committed, by the Indians. It would only be a repetition of those horrible narratives, that belong to every frontier country similarly situated, when assailed by the savages, to give a detailed account of them. The principal theatre of the operations of the rangers was in this state. Those operations had a great effect to repress the incursions of the savages. A great alarm excited by the savages near Rock river, has recently been dispelled by marching a considerable body of troops there.

A considerable number of Sacs and Foxes still inhabit the banks of Rock river, or its waters. The Kaskaskia, Cahokias, Peorias, Piankashaws, Mascoutins, Delawares, and Shawnese, are chiefly extinct tribes, or have emigrated from this region. Chippeways and Pottawatomies are still seen in the limits of this state, as occasional hunters or vagrants among the people. But by different treaties the Indians have ceded the greater part of their territorial claims to lands. The country has experienced, until recently, almost entire freedom from their depredations since the war; and has rapidly advanced in population and improvement. For a series of years, in every autumn, long lines of teams might be seen moving towards Sangamon or *Mauvaise terre*, the grand points of attraction to immigrants. Nearly the same order of events occurred here, as in Missouri, in relation to the pecuniary embarrassments of the people, after the war. The same expedients of "*relief laws*," and loan office

banking paper were adopted, with precisely the same results. The history of events in Missouri will answer for that of Illinois, with very little variation. Illinois has adopted a constitution, which does not admit involuntary servitude, or the tenure by which masters hold slaves. Some unsuccessful efforts were made by the immigrants from the slave holding states, to have their constitution amended, to admit of slavery. The question was casually agitated in the papers, and a convention for the purpose was proposed. But the moderation and good sense of the people allowed this irritating investigation to sleep undisturbed. This great state, with unoccupied and fertile soil, to support millions of agricultural people in affluence, must ultimately become populous and powerful.

Curiosities. Rock Fort is a projection from the left bank of the river Illinois. Its base is washed on three sides by the Illinois, which here flows rapidly over a rocky bed. Broken masses of rock are seen above the surface of the water. The judgment of the beholder would give the height of this cliff at 250 feet. The actual measurement might, however fall short of this. Its perpendicular sides, arising from the river, are inaccessible. It is connected with a chain of hills that extend up the Illinois, by a narrow ledge, the only ascent to which is by a winding and precipitous path. This rock has on its top a level surface, three-fourths of an acre in extent; and covered by a soil several feet in depth, which has thrown up a growth of young trees. These form, as they receive their peculiar tints from the seasons, a verdant, or gorgeous, and parti-colored crown, for this battlement of nature's creation. The advantages which it affords, as an impregnable retreat, induced a band of Illinois Indians, who sought a refuge from the fury of the Pottowatomies, with whom they were at war, to intrench themselves here. They repulsed all the assaults of their besiegers, and would have remained masters of their high tower, but for the impossibility of longer obtaining supplies of water. They had been used to attaching vessels to ropes of bark, and dropping them into the river from an overhanging point. Their enemies stationed themselves in canoes at the base of the cliff, and cut off the ropes as fast as they were let down. The consequence of this was a surrender and the entire extirpation of the band. An intrenchment corresponding to the edge of the precipice, is distinctly visible, and fragments of antique pottery, and other curious remains of the vanished race, are strewn around. From this elevated point, the Illinois may be traced as it winds through deep and solitary forests, or outspread plains, onward to the Mississippi, until it disappears from the vision in the distance. In the opposite direction, a prairie stretches out and blends with the horizon. At the foot of Rock Fort, on the land side, the eye reposes on a verdant carpet, enamelled with flowers of surpassing beauty. To relieve the

uniformity from which even this beautiful view would suffer, the forest boundary of the opposite side of the prairie presents a gracefully curved line, and offers, from the noble size of the trees, and the thickness and depth of verdure of their foliage, that 'boundless contiguity of shade,' sought after by the poet.

'The Cave in Rock,' or 'House of Nature,' below Shawneetown, is pointed out to passengers on the Ohio, as a great curiosity; and its front is marked with the names of its visitors. Above and below it are high perpendicular lime stone bluffs, surmounted with cedars, above which are sailing in the blue, eagles, birds of prey, or aquatic fowls. The entrance to the cave is just above high water mark. It has an arched roof of 25 or 30 feet high, and extends back 120 feet. It has occasionally afforded a temporary winter asylum to families, descending the river. The immense prairies, and the numberless sink holes of this state are curiosities, no way different from the same spectacles in Missouri.

TENNESSEE.

MEDIAL length, 400 miles; medial breadth, 120. Between 35° and 36° 36' N. latitude, and 4° 30' and 10° W. longitude. Bounded east by North Carolina; south by Georgia, Alabama, and Mississippi; west by the river Mississippi. It was originally included in the state of North Carolina, from which it was separated, and admitted into the Union, in 1796.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Nashville.</i>
Anderson,	Clinton,	195 miles.
Bedford,	Shelbyville,	52
Bledsoe,	Pikeville,	109
Blount,	Marysville,	197
Campbell,	Jacksboro',	143
Carroll,	Huntingdon,	109
Carter,	Elizabethton,	116
Claiborne,	Tazewell,	243
Cook,	Newport,	247
Davidson,	Nashville,	
Dickson,	Charlotteville,	40
Dyer,	Dyersburgh,	168
Fayette,	Somerville,	184
Fentress,	Jamestown,	131
Franklin,	Winchester,	82
Gibson,	Trenton,	139
Giles,	Pulaski,	77
Grainger,	Rutledge,	232
Greene,	Greenville,	273
Hardiman,	Bolivar,	158

Hamilton,	Hamilton, C. H.	148
Hardin,	Savannah,	112
Hawkins,	Rogersville,	264
Haywood,	Brownsville,	175
Henderson,	Lexington,	180
Henry,	Paris,	108
Hickman,	Vernon,	66
Humphreys,	Reynoldsburgh,	78
Jackson,	Gainesboro',	79
Jefferson,	Dundridge,	229
Knox,	Knoxville,	199
Lawrence,	Lawrenceburgh,	75
Lincoln,	Fayetteville,	73
McMinn,	Athens,	153
McNairy,	Purdy,	128
Madison,	Jackson,	147
Marion,	Jasper,	114
Maury,	Columbia,	42
Monroe,	Madisonville,	168
Montgomery,	Clarksville,	46
Morgan,	Morgan C. H.	161
Overton,	Monroe,	109
Obion,	Troy,	161
Perry,	Shannonville,	114
Rhea,	Washington,	129
Roane,	Kingston,	159
Robertson,	Springfield,	25
Rutherford,	Murfreesboro',	33
Sevier,	Sevier C. H.	225
Shelby,	Memphis,	224
Smith,	Carthage,	52
Stewart,	Dover,	81
Sullivan,	Blountsville,	306
Sumner,	Gallatin,	25
Tipton,	Covington,	197
Warren,	McMinnville,	74
Washington,	Jonesboro',	298
Wayne,	Waynesboro',	92
Weakly,	Dresden,	132
White,	Sparta,	92
Williamson,	Franklin,	18
Wilson,	Lebanon,	31

Nashville is 714 miles from Washington; 594 from New Orleans; 297 from Cincinnati; 288 from Indianapolis; and 993 from New York.

The census of 1830 gives the population of this state as follows: Whites, 537,930. Slaves, 142,379. Total, 684,822.

Face of the Country. In this respect this state is more diversified than any other in the western country. The Cumberland mountains range through it in an oblique direction, dividing it into two distinct sections, called East and West Tennessee. In East Tennessee the Alleghanies branch out into a great number of ridges. Among these the most lofty are Cumberland, and Laurel ridge. Stone, Yellow, Iron, Bald, and Unaka, are different peaks of a continued chain. Welling's and Copper ridge, and Clinch, Powell's, and Bay's mountains are at the north-east of the state. It is singular that all these mountains have a dip towards the west, apparently surpassing that of their eastern declivity. Mountains and hills occupy a very great proportion of the state. There can be nothing grand and imposing in scenery; nothing striking and picturesque in cascades and precipitous declivities of mountains, covered with wood; nothing romantic and delightful in deep and sheltered valleys, through which wind clear streams, which is not found in this state. Even the summits of some of the mountains exhibit *plateaus* of considerable extent, which admit of good roads, and are cultivated and inhabited. The mountains and hills subside as they approach the Ohio and Mississippi. On the valleys of the small creeks and streams are many pleasant plantations, in situations beautiful, and yet so lonely that they seem lost among the mountains. These valleys are rich, beyond any of the same description elsewhere in the western country. The alluvions of the great streams of Tennessee and Cumberland differ little from those of the other great streams of the west. As great a proportion of the cultivable land in Tennessee is first rate, as in any other of the western states. The soil in East Tennessee has uncommon proportions of dissolved lime, and nitrate of lime mixed with it, which give it a great share of fertility. The descending strata in West Tennessee appear to be arranged in the following order: first, loamy soil, or mixture of clay and sand; next, yellow clay; thirdly, a mixture of red sand and red clay; and lastly, a sand, as white as is seen on the shores of the Atlantic. In the southern parts of the state are immense banks of oyster shells, of a size, that in some instances, the half of a single shell weighs two pounds. They are found on high table grounds, far from the Mississippi, or any water course, and at a still greater distance from the Gulf of Mexico.

Earths, Fossils, and Salts. Beautiful white, grey, and red marbles are found in this state. Inexhaustible quarries of gypsum, of the finest quality, abound in East Tennessee, in positions favorable to be transported

by the boatable waters of the Holston. Burr mill stones are quarried from some of the Cumberland mountains. Beautiful specimens of rock crystals are sometimes discovered. One or two mines of lead have been worked; and iron ore is no where more abundant. Salt springs abound in the country; though few of them are of a strength to justify their being worked. Nitrous earth is very abundant; and any quantity, required in the arts, might be made from the earth of the *saltpetre coxa*, which abound in this state.

These caves are among the most astonishing curiosities. One of them was descended four hundred feet below the surface; and on the smooth lime stone at the bottom was found a stream of pure water, sufficient to turn a mill. A cave, on an elevated peak of Cumberland mountain, is a perpendicular descent, the bottom of which has not yet been soundd. Caves, in comparison with which the one so celebrated at Antiparos is but a slight excavation, are common in this region of subterranean wanderers. The circumstance of their frequency prevents their being explored. Were they fewer in number, we might amuse our readers with accurate descriptions of the noblest caves in the world. As it is, little more of them is known, than that they abound with nitrous earth; that they sprig up with vaulted roofs, or run along, for miles, in regular oblong excavations. A cave, which may be descended some hundred feet, and traced a mile in length, is scarcely pointed out to the traveller, as an object worthy of particular notice. The most remarkable of these subterranean wanderers has been traced ten miles.

Climate and Productions. The climate of this medial region, between the northern and southern extremities of the country, is delightful. Tennessee has a much milder temperature than Kentucky. In Wet Tennessee great quantities of cotton are raised; and the growing of that article is the staple of agriculture. Snows, however, of some depth, are frequent in the winter. But the summers, especially in the more elevated regions, are mild; and have not the sustained ardors of the same season in Florida and Louisiana. Apples, pears, and plums, which are properly northern fruits, are raised in great perfection. The season of planting for maize, in the central parts of the state, is early in April. In elevated and favorable positions, no part of the United States is healthier. In the low valleys where stagnant waters abound, and on the alluvions of the great rivers, it is sickly.

Almost all the forest trees of the western country are found within the limits of this state. The laurel tribes are not common. Juniper, red cedar, and savine, are seen on the numberless summits and declivities of the mountains. Cotton, indigo, corn, whiskey, horses, cattle, flour, gunpowder, saltpetre, poultry, bacon, lard, butter, apples, pork, coarse linen,

tobacco, and various other articles, constitute the loading of boats, that come down the Cumberland and the Tennessee; and these articles are produced in great abundance. Cotton, of a certain quality, is known by the name of Tennessee cotton, in all places where American commerce has reached. In sheltered situations, figs might be raised in perfection. The present outlets of the commerce of the state are the Cumberland and Tennessee rivers. The southern divisions of this state are so much nearer the gulf of Mexico, by the Alabama, that there can be no doubt that the enlightened and enterprising people will, before long, make canals, which shall connect the waters of the Tennessee with those of the Alabama and Mobile; and thus shorten the very circuitous present communications of this state with the gulf of Mexico to one-third of their present distance.

Rivers. We have already described the Tennessee, and its principal branches, under the head of Alabama. It may not be amiss to repeat, that it rises in the Alleghany mountains, traverses East Tennessee, and almost the whole northern limit of Alabama, enters Tennessee, and crosses nearly the whole width of it into Kentucky, and thence empties into the Ohio. Its whole course, from its fountains to that river, is longer than that of the Ohio from Pittsburgh to its mouth, being by its meanders, nearly one thousand two hundred miles. It is by far the largest tributary of the Ohio; and it is a question, if it do not furnish as much water as the main river. It is susceptible of boat navigation for at least a thousand miles. It enters the Ohio thirteen miles below the mouth of the Cumberland, and fifty-seven above that of the Ohio. Its head branches in East Tennessee are Holston, Nolachucky, French Broad, Tellico, Richland, Clinch, Big Emery, and Hiwassee rivers. In its whole progress, it is continually receiving rivers that have longer or shorter courses among the mountains. The principal of these are Powell's, Sequalchee, Elk, and Duck rivers.

The Cumberland rises in the Cumberland mountains, in the south-east part of Kentucky, through which it has a course of nearly two hundred miles. It has a circuit in Tennessee of two hundred and fifty miles; and joins the Ohio in the state of Kentucky. Its principal branches in this state, are Obed's river, Carey's Fork, Stone's, Harpeth, and Red rivers. Most of the tributaries of this and Tennessee rivers rise in the mountains, and are too shallow for boat navigation, except in the time of floods. Occasional floods occur at all seasons of the year, in which flat boats can be floated down to the main river, to await the stage of water, when that, also, shall be navigable to New Orleans. Obion, Forked Deer, Big Hatchee, and Wolf rivers, enter the Mississippi on the western boundary of the state. These rivers form important boatable communications from the interior of that large and fine district of country, 'the Jackson purchase,'

with the Mississippi. It would form but a barren catalogue of barbarous words, to give the names of all the rivers, large and small, that water this state. No part of the western country is better watered. It is a country of hills and mountains, and mountain streams, and beautiful valleys.

The Jackson purchase, in the west part of Tennessee, has not been settled more than thirteen years; but its fertility and prosperity are indicated by the fact, that there are already fifteen or sixteen counties in it.

Agriculture, Produce, and Manufactures. Cotton is the staple article of growth. But the soil and climate rear all the products of Kentucky in abundance; and as neither in the staple of the cotton, or its amount, can they compete with the more southern states, and taking into view the great depression of the price of that article, it is hoped that the hardy and intelligent farmers of this great state will turn their attention to some other articles of cultivation, particularly the silk mulberry, the vine, and the raising of bees, for which the soil and climate seem to be admirably fitted. Wheat, rye, barley, spelts, oats, Indian corn, all the fruits of the United States, with the exception of oranges, grow luxuriantly here. In East Tennessee, considerable attention is paid to raising cattle and horses, which are driven over the mountains to the Atlantic country for sale. In 1820, the number of persons employed in agriculture was 109,919; and in manufactures 7,860. The amount of articles manufactured was estimated at between four and five millions of dollars. The principal articles were iron, hemp, cotton, and cordage. The exports have hitherto been through New Orleans. Some of the articles are sent to the head waters of the Ohio, and recently some have been wagoned across the ridges to the waters of the Alabama, and have found their way to the gulf by Mobile. Over a thousand persons are employed in conducting the commerce of the state.

Chief Towns. Murfreesborough was until recently the political metropolis of the state. It is situated on Stone's river, thirty-two miles south-east from Nashville; and contains about fourteen hundred inhabitants. It is central to the two great divisions of the state, and is surrounded by a delightful and thriving country.

Nashville is the present capital of the state, and the largest town in it. It is very pleasantly situated on the south shore of the Cumberland, adjacent to fine bluffs. Steam boats can ordinarily ascend to this place, as long as they can descend from the mouth of the Cumberland to that of the Ohio. It is a place that will be often visited, as a resort for the people of the lower country, during the sultry months. Scarcely any town in the western country has advanced with more rapid strides.

The legislature has recinded a law forbidding the introduction of any branch of the bank of the United States into this state. A branch of that

bank has been fixed here, and has greatly favored the growth of the town. A splendid hotel, which had been burnt, has been rebuilt in more than its former beauty. The town is adorned with one of the largest and handsomest market houses in the western country. It is the seat of the University of Nashville, which, in regard to its professorships, library, chemical and philosophical apparatus, the estimation of its president, and the actual fruits of its utility, has taken a high place among western institutions of the kind. It has a number of churches, a lyceum, and many handsome private dwellings. It issues four or five gazettes, which rank among the most respectable in the west. The citizens in general, evince an encouraging interest in the advancement of science, literature, and taste. Few towns impart more pleasant impressions of general hospitality and urbanity to strangers. It contains 5,111 inhabitants. It is seven hundred and fourteen miles south-west from Washington; 504 north-east from New Orleans; 204 south-west from Cincinnati; 288 south from Indianapolis, and 937 south-west from New York.

Knoxville, the chief town of East Tennessee, is situated on Holston river, four miles below its junction with French Broad. It contains about three thousand inhabitants; has growing manufactures, a respectable seminary of learning, and is a pleasant and thriving place. Knoxville College, in this town, is one of the oldest seminaries in the state. Beside this and Nashville University, there is Greenville College, incorporated in 1794, with from 30 to 40 students, and the theological institution at Marysville in East Tennessee. It has a library of 5,500 volumes; is under Presbyterian supervision, containing in the theological and academical departments, fifty-five students.

The following are considerable villages, containing from five hundred to one thousand five hundred inhabitants. Blountsville, Rogersville, and Rutledge on Holston river. Tazewell, Grantsborough, and Kingston, on Clinch river. Jonesborough, Greenville, Newport, Dandridge, Sevierville, on French Broad and its waters. Marysville, Washington, Pikeville, Madison, Winchester, Fayetteville, Pulaski, Shelbyville, Columbia, Vernon, and Reynoldsburg, on the Tennessee and its waters. Montgomery, Monroe, Sparta, Carthage, Gallatin, Lebanon, M'Minnville, Jefferson, Franklin, Haysborough, Charlotte, Springfield, Clarksville, on the Cumberland and its waters. One of the most terrible storms recorded in the annals of our country, occurred in May 1830, in a district of which Carthage and Shelbyville, were the centre. It was a mingled tempest of wind, thunder, lightning, and rain. Trees, houses, and every thing on the surface were prostrated. Five persons were killed, and many wounded; and property destroyed to the value of eighty thousand dollars. Memphis occupies the former site of Fort Pickering. It stands on one of

the noblest bluffs of the Mississippi, proudly elevated above that river, and its fine opposite bottoms. A beautiful rolling country surrounds it in the rear. A remnant of the tribe of the Chickasaws reside near it. The original inhabitants of this village were chiefly of mixed blood. Since it has taken such an imposing name it has made considerable progress; and from its intermediate position between the upper and lower country, and from its being the point of general traverse from Tennessee to the vast regions on the Arkansas, Washita, and Red river, there can be no doubt that it will ultimately become a considerable place. It is one of the places on the Mississippi, which passing steam boats generally honor with the discharge of their cannon, as they ascend the river by it. At no great distance back of this town, is Nashoba, the seat of the grand experiment of Miss Frances Wright, in her attempts to educate and emancipate slaves.

Natural Curiosities. This would easily swell to a copious article. We have already touched on the singular configuration of the lime stone substrata of this country, from which it results, that there are numberless extensive cavities in the earth. Some have supposed that these hollows are extended under the greater part of the surface of the state. Springs, and even considerable streams of water flow in them, and have subterraneous courses. Caves have been explored at great depths for an extent of ten miles. They abound in singular chambers, prodigious vaulted apartments, and many of them, when faintly illumined with the torches of the visitants, have a gloomy grandour, which no description could reach. The bones of animals, and in some instances, human skeletons have been found in them. The earth of these caves is impregnated strongly with nitrate of lime, from which any quantity of gun powder might be made.

On some spurs of the Cumberland mountains, called the Enchanted mountains, are marked in the solid limestone, footsteps of men, horses, and other animals, as fresh as though recently made, and as distinct as though impressed upon clay mortar. The tracts often indicate that the feet which made them had slidden, as would be the case in descending declivities in soft clay. They are precisely of the same class with the impress of two human feet found in a block of solid limestone, quarried at St. Louis on the margin of the Mississippi. The manner in which they were produced is entirely inexplicable.

Tennessee is abundant in petrifications and organic remains. Near the southern boundary of the state are three trees entirely petrified. One is a cypress, four feet in diameter. The other is a sycamore, and the third is a hickory. They were brought to light by the falling in of the south bank of the Tennessee. A nest of eggs of the wild turkey were dug up in a state of petrification. Prodigious claws, teeth, and other bones of animals are found near the salines. A tooth was recently in the posses-

sion of Jeremiah Brown, Esqr. which Judge Haywood affirms, measured a number of feet in length, and at the insertion of the jaw "was eight inches broad. At a sulphur spring twelve miles from Reynoldsburgh, was found a tusk of such enormous dimensions, as that it was supposed to weigh from one to two hundred pounds. It is shining, yellow, and perfectly retains the original conformation. Near it were found other bones, supposed to belong to the same huge animal. It is calculated, from the appearance and size of the bones, that the animal, when living, must have been twenty feet high. Logs and coal, both pit and charcoal, are often dug up in this state, at depths from sixty to one hundred feet below the surface. Jugs, vases, and idols of moulded clay, have been found in so many places, as hardly to be deemed curiosities. Walls of faced stone, and oven walled wells have been found in so many places, and under such circumstances, and at such depths, as to preclude the idea of their having been made by the whites of the present day, or the past generation. In this state, as well as in Missouri, burying grounds have been found, where the skeletons seem all to have been pigmies. The graves in which the bodies were deposited, are seldom more than two feet, or two feet and a half in length. To obviate the objection, that these are all bodies of children, it is affirmed that these skulls are found to possess the *dentes sapientie*, and must have belonged to persons of mature age.

There are many beautiful cascades in Tennessee. One of the most striking is that known by the name of the 'falling water.' The cascade is eight miles above its junction with the Caney Fork, and nearly fifty from Carthage. For some distance above, the river is a continual cataract, having fallen, in a little distance, 150 feet. The 'fall,' or perpendicular leap, is two hundred feet, or as some measure it, one hundred and fifty feet. The width of the sheet is eighty feet, and the noise is deafening. Taylor's creek fall is somewhat greater than this. It is differently estimated from two hundred to two hundred and fifty. The descent to the foot of the rock is difficult and dangerous; but the grandeur of the spectacle richly compensates the hazard. The spectator finds himself almost shut out from the view of the sky, by an overhanging cliff, between three and four hundred feet high. The stream before him, falling from the last rock in sheets of foam, almost deafens him with the noise. A considerable breeze is created by the fall, and the mist is driven from the falling spray like rain. Twenty yards below this, on the south side, is the most beautiful cascade of which the imagination can conceive. A creek six or eight feet wide, falls from the summit of an overhanging rock, a distance of at least 300 feet. The water, in its descent, is divided into a thousand little streams, which are often driven by the wind, in showers of rain, for a number of yards distance.

Much discussion has ensued, and much useless learning been thrown away, touching some silver and copper coins, found some years since, at a little distance below the surface, near Fayetteville, in this state. One of the silver coins purports to be of Antonius and the other of Commodus. The earth under which the copper coins were found, was covered with trees, which could not be less than four hundred years old. There can be no doubt that such coins were found; and there seems some difficulty in supposing them to have been deposited, merely to play upon the credulity of some virtuoso. But, as such deceptions have been known to be practised, in some instances, we offer it as a possible solution.

The paintings that are found on some high, and apparently inaccessible rocks, in this state, have been mentioned as curiosities, ever since it has been visited by white men. The figures are of the sun, moon, animals, and serpents; and are out of question the work of former races of men. The colors are presented as fresh as though recently done, and the delineations in some instances are vivid and ingenious.

A curious appearance, so common to the people of the country, as no longer to strike them with wonder, is the immensely deep channels, in which many of the streams of this country run. Descending many of them, that are large enough to be boatable, the astonished voyager looks up, and sees himself borne along a river running at the base of perpendicular lime stone walls, sometimes three or four hundred feet high. The view is still more grand and surprising, when the spectator looks down from above, and sees the dark waters rolling at such prodigious depths below him, in a regular excavation, that seems to have been hewn from the solid lime stone, on purpose to receive the river.

Constitution. This has no essential difference of feature from that of the other western states. In the legislature the number of representatives bears a given proportion to the number of taxable inhabitants, and the number of senators must never be more than one-half, or less than one-third of the number of representatives. To be eligible, as members of either house, the person must have resided three years in the state, and one in the county; and be possessed of two hundred acres of land. The governor is elected for two years, and is eligible six years out of eight. He must be twenty-five years of age; must have resided in the state four years, and must possess five hundred acres of land, to be eligible to that office. The judiciary is divided into courts of law and equity. The legislature appoints the judges, to hold their office during good behaviour. All free men, twenty-one years of age, and who have resided in the county six months preceding the election, possess the elective franchise.

Schools. There are four institutions in the state, which bear the name of colleges; one at Nashville, one at Knoxville, one at Marysville, and

Kremer College, since changed to the name of Jefferson. The Cumberland Presbyterians are making great efforts to rear a theological institution, in which to train young men for their worship. The college at Nashville has already yielded most efficient aid to the literature of the state. Academics and common schools are increasing, and the people seem to be awakening to a sense of the importance of education to the preservation of our republican institutions.

History. Tennessee asserts claims, along with Kentucky, to be the common mother of the western states. She fills a large and conspicuous place in the early annals of the west. No state suffered more terribly in its commencement, from the savages. None evinced a deeper stake in the early altercations with Spain, touching the right of navigating the Mississippi. Her fierce disputes with the mother state, North Carolina, and the intestine broils, which gave origin to the short lived republic of Frankland, while she made arrangements to become an independent state, have already been recorded. She has already sent abroad thousands of her sons, to people the states of Missouri, Illinois, Mississippi, Louisiana and Florida, Arkansas, and even Texas in the Mexican country. Yet the census of 1830 has presented her in the commanding attitude of numbering nearly seven hundred thousand inhabitants, being the second most populous of the western states. This result creates the more surprise, in as much as every one conversant with the states and territories beyond, knows how largely emigrants from this state have contributed to their settlement; and as this is the only one of the slave states which has shown an increase commensurate with the free states.

The legislature of this state has evinced a spirit of munificence and enterprise, in regard to literature and public institutions, highly creditable. It has recently appropriated twenty-five thousand dollars for the erection of a penitentiary, and one hundred and fifty thousand dollars for internal improvements. It deems, that by an easy improvement of the navigation of the Tennessee and Holston rivers, the state will save one hundred and fifty thousand dollars annually, in the transport of the single article of salt.

Tennessee has availed herself of her influence of seniority and importance in the west, by leaving a respectable impress of her character on the states and territories beyond her. No state shared a prouder part in the late war. She has already given a President to the Union. Her march since she became a state, has been almost uniformly patriotic and prosperous, and she has already attained to a high relative rank in the general confederacy.

KENTUCKY.

MEDIAL length, 400 miles. Medial breadth, 150 miles; contains forty thousand square miles. Bounded north by the river Ohio, which separates it from Ohio, Indiana and Illinois; east by Virginia; south by Tennessee; and west by the Mississippi, which separates it from Missouri.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Frankfort.</i>
Adair,	Columbia,	91 miles.
Allen,	Scottsville,	151
Anderson,	Lawrenceburgh,	12
Barren,	Glasgow,	126
Bath,	Owingsville,	73
Boone,	Burlington,	72
Bourbon,	Paris,	43
Bracken,	Augusta,	73
Brackenridge,	Hardinsburgh,	118
Bullitt,	Shepherdsville,	74
Butler,	Morgantown,	141
Caldwell,	Princeton,	229
Callaway,	Wadesboro',	262
Campbell,	Newport,	99
Casey,	Liberty,	66
Christian,	Hopkinsville,	206
Clark,	Winchester,	45
Clay,	Manchester,	115
Cumberland,	Burkesville,	119
Daviess,	Owensboro',	150

Edmonson,	Brownsville,	138
Estill,	Irvine,	71
Fayette,	Lexington,	25
Fleming,	Flemingburgh,	79
Floyd,	Prestonburgh,	142
Franklin,	Frankfort,	
Gallatin,	Port William,	57
Garrard,	Lancaster,	52
Grant,	Williamstown,	44
Graves,	Mayfield,	284
Grayson,	Litchfield,	110
Greene,	Greensburgh,	90
Greenup,	Greenup C. H.	132
Hancock,	Hawsville,	130
Hardin,	Elizabethtown,	80
Harland,	Harlan C. H.	168
Harrison,	Cynthiana,	38
Hart,	Munfordsville,	105
Henderson,	Henderson,	180
Henry,	Newcastle,	37
Hickman,	Clinton,	308
Hopkins,	Madisonville,	200
Jefferson,	Louisville,	52
Jessamine,	Nicholasville,	37
Knox,	Barboursville C. H.	122
Laurel,	Hazel Patch,	102
Lawrence,	Louisa,	127
Lewis,	Clarksburgh,	96
Lincoln,	Stanford,	51
Livingston,	Salem,	245
Logan,	Russellville,	171
McCracken,	Wilmington,	289
Madison,	Richmond,	50
Mason,	Washington,	63
Mead,	Brandenburgh,	90
Mercer,	Harrodsburgh,	30
Monroe,	Tompkinsville,	144
Montgomery,	Mountsterling,	60
Morgan,	West Liberty,	107
Muhlenburgh,	Greenville C. H.	177
Nelson,	Bardstown,	55
Nicholas,	Carlisle,	58

Ohio,	Hartford,	154
Oldham,	Westport,	44
Owen,	Owenton,	28
Pendleton,	Falmouth,	60
Perry,	Perry C. H.	148
Pike,	Piketon,	165
Pulaski,	Somersot,	85
Rock Castle,	Mount Vernon,	73
Russell,	Jamestown,	109
Scott,	Georgetown,	17
Shelby,	Shelbyville,	21
Simpson,	Franklin,	165
Spencer,	Taylorsville,	35
Todd,	Elkton,	186
Trigg,	Cadiz,	226
Union,	Morganfield,	205
Warren,	Bowling Green,	145
Washington,	Springfield,	50
Wayne,	Monticello,	110
Whitely,	Whitely C. H.	130
Woodford,	Versailles,	13

The census of 1830 gives the population of this state as follows. Whites, 518,678. Slaves, 165,350. Total, 688,844

From the eastern limit of this state, where it bounds on Virginia, to the mouth of the Ohio, is between 6 and 700 miles. In this whole distance, the northern limit of the state is on the Ohio. Thence it bounds on the Mississippi between 40 and 50 miles. Almost the whole of the state, therefore, in its configuration, belongs to the valley of the Ohio. The eastern and southern front of the state touches upon the Alleghany mountains, whose spurs descend, for a considerable distance, into it. Beyond the lower part of the valley of the Tennessee, the Kentucky shore slopes to the Mississippi. The rivers Tennessee, Cumberland, and Kentucky, have broad and deep valleys. The valley of Green river, and that in the central part of the state, are noted for their extent, beauty, and fertility. But, though Kentucky has been generally estimated to possess larger bodies of fertile land than any other western state, and although nothing can exceed the beauty of the great valley of which Lexington is the centre, yet there are in Kentucky large sterile tracts, and much land too mountainous, or too poor, for cultivation. The centre of the state is delightfully rolling. A tract of country, nearly one hundred miles in one direction, and fifty in the other, is found here, which for beauty of surface, amenity of landscape, the delightful aspect

of its open groves, and the extreme fertility of its soil, exceeds perhaps any other tract of country of the same extent. Under this great extent, at a depth of from three to ten feet, is a substratum or floor of limestone. So much dissolved lime is mixed with the soil, as to impart to it a warm and forcing quality, which imparts, when the earth is sufficiently moist, an inexpressible freshness and vigor to the vegetation. Through this beautiful country meander the Little Sandy, Licking, Kentucky and Salt rivers, and their numerous branches. In it there are few precipitous hills. Much of the soil is of that character technically known by the name '*mulatto land*.' The woods have a charming aspect, as though they were promiscuously arranged for a pleasure ground. Grape vines of prodigious size climb the trees, and spread their umbrageous leaves over all the other verdure. Black walnut, black cherry, honey locust, buckeye, pawpaw, sugar tree, mulberry, elm, ash, hawthorn, coffee tree, and the grand yellow poplar, trees which indicate the richest soil, are every where abundant. In the first periods of the settlement of the country, it was covered with a thick cane brake, that has disappeared, and has been replaced by a beautiful grass sward of a peculiar cast even in the forest. In the early periods of spring, along with the purple and redundant flowers of the red bud, and the beautiful white blossoms of the dog wood, there is an abundance of that beautiful plant, the May apple, the rich verdure of which has an indescribable effect upon the eye. The trees generally are not large, but tall, straight, and taper; and have the aspect of having been transplanted to the places which they occupy. Innumerable branches wind among these copses; and in the declivities burst out springs of pure lime stone water.

That part of the state which borders on Tennessee and Virginia, resembles the country in the vicinity of the Alleghanies and Tennessee. The landscape painter might come here, and find that nature had transcended any mental conceptions of the *beau ideal* of scenery. The numerous mountain branches wind round the bases of the small table hills, cutting down deep and almost frightful gullies, and forming 'caves,' as they are called by the people, or gulfs, covered with the shade of immensely large poplars, often eight feet in diameter. Such a tree will throw into the air a column of an hundred feet shaft. No words would convey adequate ideas of the lonely beauty of some of these secluded spots.

Between the Rolling Fork of Salt river and Green river, is a very extensive tract, called 'barrens.' The soil is generally good, though not of the first quality. But the country, sparsely shaded with trees, is covered with grass like a prairie, and affords a fine range for cattle. Between Green and Cumberland rivers is a still larger tract of 'barrens.'

Spread over this district is an immense number of knobs, covered with shrubby and post oaks. In the year 1800, the legislature made a grant of four hundred acres of this land to every man who chose to become an actual settler. A great many occupants were found on these conditions. The country proved to be uncommonly healthy. So much of the land was incapable of clearing and cultivation from a variety of causes, that the range will probably remain unimpaired for a long time. Game abounds. Swine are raised with the greatest ease. Enough land is capable of cultivation to supply all the needs of the settlers. Many farmers on this soil make fine tobacco. These lands have come into reputation; and they who received their farms as a free gift, are now living comfortably, and rearing respectable families in rustic independence.

For variety of hill and dale, for the excellence of the soil, yielding in abundance all that is necessary for comfortable subsistence, for amenity of landscape, beauty of forest, the number of clear streams and fine rivers, health, and the finest development of the human form, and patriarchal simplicity of rural opulence, we question if any country can be found surpassing Kentucky. We have heard the hoary 'residents,' the compatriots of Daniel Boone, speak of it as it appeared to them, when they first emigrated from their native Virginia and North Carolina. It was in the spring when they arrived. The only paths among the beautiful groves, were those which the buffaloes and bears had broken through the cane brakes. The wilderness displayed one extended tuft of blossoms. A man stationed near one of these paths could kill game enough, with a proportion of turkeys and other large birds, in an hour, to supply the wants of a month. There can be no wonder that hunters, men who had been reared among the comparatively sterile hills of Virginia and North Carolina, men who loved to range mountain streams, and sheltered glades, should have fancied this a terrestrial paradise. The beautiful configuration of the soil remains. The whole state is studded with plantations. The buffaloes, bears, Indians, and the cane brake, the wild, and much of the naturally beautiful of the country, is no more. The aged settlers look back to the period of this first settlement as a golden age. To them the earth seems to have been cursed with natural and moral degeneracy, deformity, and sterility, in consequence of having been settled. This is one of the solutions to account for that restless desire to leave the settled country, and to emigrate to new regions, which so strongly marks many of the old settlers.

Rivers. The Ohio washes a long extent of the northern frontier; and the Mississippi a considerable distance of the south-western shore. The former river we propose to describe under the head of the state of Ohio;

and the latter has already been described. Most of the rivers of this state rise in its southern limits, and flow northwardly into the Ohio. The state may be considered as one vast plateau, or glacis, sloping from the Alleghany hills to the Ohio.

Big Sandy rises in the Alleghany mountains, near the heads of Cumberland and Clinch, and forms the eastern boundary of the state for nearly two hundred miles. Forty miles before its entrance into the Ohio, it divides into two branches, the north-east and the south forks. It is navigable to the Wascoto mountains. At its entrance into the Ohio it is two hundred yards broad. In its progress it receives a great number of large creeks, among which are Shelby, Bear, Turtle, Bartle's, Paint, and Blane's, all of which run east or north-east. Between Sandy and Licking the following creeks and streams enter the Ohio, being from twenty to seventy miles long, and from fifty to twelve yards wide at their mouth. Little Sandy enters twenty-two miles below Big Sandy; and the following creeks enter the Ohio at moderate distances, not exceeding twenty-two, and not falling short of two or three miles from each other; viz: Tiger's creek, Conoconque, Salt Lick creek, Sycamore, Crooked creek, Cabin creek, Brook creek, Lime Stone, and Bracken.

Licking river rises in the north-east corner of the state, almost interlocking with the head waters of Cumberland river. It seeks the Ohio by a north-western course, and meets it at Newport, opposite Cincinnati. It has a sinuous course of two hundred miles. In dry summers the water almost disappears from the channel. When the streams are full, in the winter and spring, many flat boats descend it from a distance of seventy or eighty miles from its mouth. It waters a rich and well settled country.

Kentucky is an important stream, and gives name to the state. It rises in the south-east parts of it, interlocking with the head waters of Licking and Cumberland. By a north-west course it finds the Ohio at Port William, seventy-seven miles above Louisville. It is one hundred and fifty yards wide at its mouth, and navigable one hundred and fifty miles. It has a rapid current and high banks. Great part of its length it flows in a deep chasm, cut from perpendicular banks of lime stone. Nothing can be more singular than the sensation arising from floating down this stream and looking up this high parapet at the sun and the sky from this dark chasm. Elkhorn, a beautiful stream that enters Kentucky river ten miles below Frankfort, has two forks. The first heads near Lexington, and the second near Georgetown. These branches water Scott and Fayette counties, and are well calculated for driving mills of all kinds. Dick's river is a branch of Kentucky. It has a course of

fifty miles, and is fifty yards wide at its mouth. Its current, like that of its parent stream, is rapid; and its course confined by precipices of lime stone, down which the astonished spectator looks often three hundred feet before the eye catches the dark stream rolling below. Salt river rises in Mercer county, from three head sources, and enters the Ohio twenty miles below Louisville. It is boatable one hundred and fifty miles, and is one hundred and fifty yards wide at its mouth. It passes through Jefferson, Greenup, Washington, and Mercer counties.

Green river rises in Lincoln county. It enters the Ohio, two hundred miles below Louisville, fifty miles above the mouth of Cumberland. It is boatable two hundred miles, and two hundred yards wide at its mouth. It receives, in its progress, a great number of tributaries, among which are Great Barren, Little Barren, Rough river, and Panther's creek. It is one of the most important rivers in the state, and has a great length of boatable water.

Cumberland river rises in the south-east corner of this state, interlocking with the south fork of Big Sandy. We have already partially described this river; but, as it belongs as much to this state as to Tennessee; we add, that it runs eighty miles in this state; then crosses into Tennessee; runs forty miles in that state, and makes a curve, by which it returns into this state again. It once more enters that state, after a course of fifty miles in this. It winds two hundred miles through Tennessee; passes by Nashville, and once more enters this state. It unites with the Ohio by a mouth three hundred yards in width, and is navigable by steam boats of the first class to Nashville; and by keel boats, in moderate stages of the water, three hundred miles farther. It is a broad, deep, and beautiful river, and uncommonly favorable to navigation. Trade Water and Red river, are its principal branches in Kentucky. The one is seventy, and the other fifty yards wide, at its mouth. The Tennessee, of which we have already given a description, enters the Ohio in this state, and runs in it seventy-five miles. Kaskinompas river rises near the Tennessee; and running a western course, enters the Mississippi, half way between the mouth of Ohio and New Madrid.

Minerals and Mineral Waters. The state is all of secondary formation. Lime stone, and marble, of the most beautiful species, abound. Coal appears in some places, especially along the Ohio. Iron ore is in the greatest abundance; and is wrought to a considerable extent. Lead, and copperas, and aluminous earths, are found. There are a number of salt springs in the state, from which great quantities of salt used to be made. But salt is made so much cheaper, and more abundantly, at the Kanawha works, that this state imports chiefly from that place.

In Cumberland county, in boring for salt water, at the depth of one hundred and eighty feet, a fountain of petroleum, or what is there called mineral oil, was struck. When the augur was withdrawn, the oil was thrown up in a continued stream more than twelve feet above the surface of the earth. Although the quantity somewhat abated, after the discharge of the first few minutes, during which it was supposed to emit seventy-five gallons a minute, it still continued to flow in a stream, that made its way to the Cumberland, for a long distance covering the surface with its oily pellicle. It is so penetrating as to be difficult to confine it in any wooden vessel. It ignites freely, and produces a flame as brilliant as gas light, for which it might become a cheap and abundant substitute.

The Olympian springs, 47 miles east of Lexington, are in a romantic situation. They consist of a number of springs of different medicinal qualities, partly sulphureous, and partly chalybeate, and are a place of great resort. Big Bone Lick is 20 miles below Cincinnati, on the Kentucky side of the river, and not far from it. The waters are impregnated with sulphuretted hydrogen gas, and have a peculiarly favorable effect in dropsical cases, and affections of the liver. The huge organic remains of animals, called by the name mammoth, were found in great numbers, in digging near this lick. There are great numbers of mineral springs, of different qualities, in different parts of the state. But the medicinal spring, which is far the most frequented of any, is that near Harrodsburg. The water has a slight sweetish and styptic taste. It contains sulphate of magnesia, and other mineral impregnations. There are fine accommodations for invalids. The situation is healthy and delightful; and in the summer it has become a great and fashionable resort for invalids from this and the neighboring states. The waters are salutary in affections of the liver, and dyspeptic and chronic complaints; and this is, probably, one of the few springs where the waters are really a salutary and efficient remedy for the cases to which they are suited.

Agriculture and Produce. Kentucky, from her first settlement, has had the reputation of being among the most fertile of the western states. The astonishing productiveness of her good lands, the extent of her cultivation, the multitude of flat boats which she loads for New Orleans' market, and the great quantities of produce, which she now sends off by steam boats, justify the conclusion. All the grains, pulses, and fruits, of the temperate climates, she raises in the greatest abundance. Her wheat is of the finest kind; and there is no part of the western country where maize is raised with greater ease and abundance. Garden vegetables of all kinds succeed. Grapes, of the cultivated kinds, are raised for table fruit, in many places; and there are considerable numbers of vineyards, where wine is made. Cotton is not raised, except for domestic use. Hemp

and tobacco are the staples of the state. Both are raised in the greatest perfection. In 1820, the number of persons employed in agriculture, was one hundred and thirty-two thousand and sixty; and of manufactures, one hundred and ten thousand seven hundred and seventy-nine; and of persons employed in commerce, one thousand six hundred and seven. The products of agriculture and manufactures have since increased nearly in the ratio of the increasing population.

The present exports are chiefly to New Orleans; though a considerable quantity of produce and manufactures ascends the Ohio to Pittsburgh. It is not uncommon for the growers of the produce of this state, on arriving at New Orleans, to ship, on their own account, to the Atlantic states, to Vera Cruz, and the West Indies. Besides the articles mentioned above, she sends off immense quantities of flour, lard, butter, cheese, pork, beef, Indian corn and meal, whiskey, cider, cider-royal, fruit, both fresh and dried, and various kinds of domestic manufactures.

Horses are raised in great numbers, and of the noblest kinds. A handsome horse is the highest pride of a Kentuckian; and common farmers own from ten to fifty. Great numbers are carried over the mountains to the Atlantic states; and the principal supply of saddle and carriage horses in the lower country is drawn from Kentucky, or the other western states. The horses are carried down in flat boats. Great droves of cattle are also driven from this state, over the mountains, to Virginia and Pennsylvania.

In 1828, the value of the cattle, horses, and swine, driven out of the state, numbered and valued at one point of passage,—the Cumberland Ford,—was a million of dollars. The returns of the value of exports, agricultural and manufactured, in 1829, wanted a number of counties of comprising the whole state; but this partial return gave two millions seven hundred and eighty thousand dollars.

Chief Towns. Frankfort, the political metropolis of the state, is situated on the north bank of the Kentucky, sixty miles above its entrance into the Ohio. The environs of the beautiful plain on which the town is built, are remarkable for their romantic and splendid scenery. The river divides the town into Frankfort and South Frankfort, which are connected by a bridge across the Kentucky, which here flows between banks four or five hundred feet in height. Both divisions contain about two thousand inhabitants. The state house is entirely of marble, with a front presenting a portico supported by Ionic columns, the whole having an aspect of magnificence. It contains the customary legislative halls, and apartments for the Court of Appeals, and the Federal Court. The stair way under the vault of the dome has been much admired. The penitentiary usually contains over one hundred convicts, and is one of the few

establishments of the kind in the United States the income from which exceeds the expenses. Its other public buildings are three churches, an academy, and county court house. It has a number of respectable manufacturing establishments, among which are three manufactories of cotton bagging, a rope walk, a cotton factory, two large warehouses, and the usual number of corresponding establishments. It is at the head of steam boat navigation, having three or four steam boats in regular employ, when the stage of water in the river admits; and is a place of considerable commercial enterprise. The public inns are on a respectable footing; and it is a place of much show and gaiety. The houses, in particular, are singularly neat, many of them being built of the beautiful marble furnished by the banks of the river. Sea vessels have been built here, and floated to New Orleans. It is situated 212 miles from Nashville; 806 from New Orleans; 20 north-west from Lexington; 149 from Indianapolis; 252 from Vandalia; 550 from Washington; 321 from St. Louis; and 85 from Cincinnati.

Lexington, the commercial capital of the state, and one of its most ancient towns, received its name from some hunters, who were encamped under the shade of the original forest, where it is built, and who, receiving the first intelligence of Lexington battle in Massachusetts, named the town after that, where commenced the great struggle of American independence. It was for a long time the political metropolis of the state, and the most important town in the west.

Transylvania University has fair claims to precedence among western collegiate institutions. Its chief edifice was burnt two years since, but is now replaced by a handsome and more commodious one. It has twelve professors and tutors, and in the academical, medical, and law classes, three hundred and seventy-six students. The buildings for the medical department are large and commodious; and its library contains four thousand five hundred volumes of standard works in medicine. All the libraries connected with the University number fourteen thousand one hundred volumes. The law school has twenty-five pupils; and the medical class two hundred and eleven, from all the southern and western states. The reputation of its professors has given it a deservedly high standing.

The Rev. Mr. Peers is at the head of a school gaining great reputation, as being the only one known in the United States, the pupils of which are professedly guided in their whole discipline, with reference to the physical, organic and moral laws of our being. The Female Academy, under the care of Rev. Mr. Woods, is in high repute, and has one hundred pupils. There are various other schools which concur with these to vindicate the high literary estimation of this city.

The other public edifices are as follows: a handsome and spacious court house, a large Masonic hall, and eleven churches, in which all the denominations of Christianity are represented. The State Lunatic Asylum is a spacious and very commodious building, containing, on an average, ninety deranged patients, under the guidance and efficient care of physicians, surgeons, and nurses. The United States Branch Bank has a large banking house, in which business in the way of discount and negotiation of bills, is annually transacted to the amount of one million seven hundred thousand dollars. The chief manufactures are those of cotton bagging, and various kinds of cordage, particularly bale rope. Of the former were manufactured in 1830, 1,000,000 yards; and of the latter, 2,000,000 pounds. There are three factories for spinning and weaving wool, and five or six for cotton; and one large and several smaller machine-making factories. In the woolen factories are manufactured handsome carpets.

The town buildings in general are handsome, and some are magnificent. Few towns in the west, or elsewhere, are more delightfully situated. Its environs have a singular softness and amenity of landscape, and the town wears an air of neatness, opulence, and repose, indicating leisure and studiousness, rather than the bustle of business and commerce. It is situated in the centre of a proverbially rich and beautiful country. The frequency of handsome villas and ornamented rural mansions, impart the impression of vicinity to an opulent metropolis. A beautiful branch of the Elkhorn runs through the city, and supplies it with water. The main street is a mile and a quarter in length, and eighty feet wide; well paved, and the principal roads leading from it to the country are McAdamized to some distance. In the centre of the town is the public square, surrounded by handsome buildings. In this square is the market house, which is amply supplied with all the products of the state. The inhabitants are cheerful, intelligent, conversable, and noted for their hospitality to strangers. The professional men are distinguished for their attainments in their several walks, and many distinguished and eminent men have had their origin here. The University, with its professors and students, and the numerous distinguished strangers that are visiting here, during the summer months, add to the attractions of the city. The people are addicted to giving parties; and the tone of society is fashionable and pleasant. Strangers, in general, are much pleased with a temporary sojourn in this city, which conveys high ideas of the refinement and taste of the country. There are now much larger towns in the west: but none presenting more beauty and intelligence. The stranger, on finding himself in the midst of its polished and interesting society, cannot but be carried back by the strong contrast, to the time when the patriarchal hunters of Kentucky,

reclining on their buffalo robes around their evening fires, canopied by the lofty trees and the stars, gave it the name it bears, by patriotic acclamation.

The number of inhabitants is six thousand one hundred and four. It is situated twenty-five miles south-east of Frankfort; two hundred and fifty-seven north-east from Nashville; eighty south from Cincinnati; and five hundred and twenty-six south-west from Washington.

Louisville, at the falls of the Ohio, in a commercial point of view, is far the most important town in the state. The main street is nearly a mile in length, and is as noble, as compact, and has as much the air of a maritime town, as any street in the western country. It is situated on an extensive sloping plain, below the mouth of Beargrass, about a quarter of a mile above the principal declivity of the falls. The three principal streets run parallel with the river, and command fine views of the villages and the beautiful country on the opposite shore.

The public buildings are a court house, jail, poor house, and work house, powder magazine, marine hospital, city school house, eight churches for the prevalent denominations of the county, Washington Hall, Columbian Inn, and other respectable hotels, City Hall, United States Branch Bank, house of Fire and Marine Insurance Company, iron foundry, Jefferson Cotton Factory, five steam mills, Union Hall, and theatre.

The marine hospital is a conspicuous and showy building. The free public school house is a noble edifice, taking into view its object. It was commenced in 1829, as a kind of model school for a general system of free schools; and was built at an expense of seven thousand five hundred dollars. It is intended to accommodate seven or eight hundred pupils.

The position of this city is $38^{\circ} 16'$ N. and $5^{\circ} 42'$ W. from Washington. It contained in 1800, six hundred inhabitants; 1810, one thousand three hundred and fifty; 1820, four thousand and twelve; 1830, ten thousand three hundred and thirty-six, having more than doubled its population within the last ten years.

The greatest fall in the Ohio is just below this city. In high stages of water, the rocks and shallows are all covered, and boats pass without perceiving them. But this stage of water does not occur, on an average, more than two months in a year, rendering it necessary at all other times, that boats from the lower country should stop here. The falls equally arrested boats from above. Consequently freights intended for the country above were required, at a great expense of time, delay, and fastorage, to be unloaded, transported by land round the falls, and reloaded in boats above. Large steam boats from New Orleans, though belonging to the upper country, were obliged to lie by through the summer at Portland.

To remedy these inconveniences, the Louisville and Portland canal round the falls has been completed. It overcomes the ascent of twenty-two feet by five locks. The first steam boat that passed through the canal, was the *Uncas*, Dec. 21, 1829.

It is two miles in length, and the excavation forty feet in depth. A part of this depth is cut from solid lime stone. It is on a scale to admit steam boats and vessels of the largest size. From the nature of the country, and the great difference between the highest and lowest stage of the water, amounting to nearly sixty feet, it is necessarily a work of great magnitude, having cost more than any other similar extent of canal work in the United States. There are various opinions in reference to the bearing of this work upon the future prosperity of Louisville. Great part of the important and lucrative business of factorage will be superseded; and as boats can ascend from Louisville to Cincinnati, with at least as great a draft of water as is allowed by the depth of the water from Louisville to the mouth of the Ohio, most of the boats from the Mississippi, that used to be arrested at the falls, will pass on to the country above. But other bearings of utility to this place, not yet contemplated, will probably grow out of the increased activity, given by the canal to business and commerce. No axiom is better established than that every part of the country, so connected as the whole coast of Ohio, flourishes and increases with the growth of every other part. If the country above and below, be flourishing, so also will be Louisville. Besides, this important town has intrinsic resources, which will not fail to make it a great place. More steam boats are up in New Orleans for it than any other; and except during the season of ice, or of extremely low water, there seldom elapses a week without an arrival from New Orleans. The gun of the arriving or departing steam boats is heard at every hour of the day and the night; and no person has an adequate idea of the business and bustle of Louisville, until he has arrived at the town. The country of which this town is the county seat, is one of the most fertile, and best settled in the state. The town was formerly subject to frequent attacks of endemic sickness, in the summer and autumn, owing to stagnant waters in its vicinity. The ponds and marshes have been in a great measure drained; and the health of the town has improved in consequence. It has been for some years nearly as healthy as any other town in the same latitude on the Ohio.

It is fifty-two miles north of Frankfort; one hundred and fifty south-west by water, and one hundred and forty by the mail route from Cincinnati; fifty-one west from Lexington; and six hundred and sixty-two west from Washington.

Maysville, the next town in Kentucky in point of commercial importance to Louisville, is situated just below the mouth of Lime Stone creek,

two hundred and seventy-five miles by land, and five hundred by water, below Pittsburgh. It has a fine harbor for boats, and is situated on a narrow bottom on the verge of a chain of high hills. There are three streets running parallel with the river; and four streets crossing them at right angles. The houses are about five hundred in number; and the inhabitants about four thousand. This place has the usual number of stores and manufactories. Glass and some other articles are manufactured to a considerable extent. It has a market house, court house, three houses for public worship, and some other public buildings. What has given particular importance to Maysville, is its being the principal place of importation for the north-east part of the state. The greater part of the goods for Kentucky from Philadelphia and the eastern cities, are landed here, and distributed hence over the state. It is a thriving, active town, and a number of steam boats have been built here.

Washington, three miles south of this place, is a considerable village, in the centre of a fertile and well peopled country. It has three parallel streets, two houses for public worship, a court house, jail, two seminaries of learning, a post and printing office, the customary stores and mechanic shops, and a branch of the Kentucky bank.

Paris, the chief town of Bourbon county, is situated on a fine hill, on Stoner fork of Licking river, at the mouth of Houston creek. There are a number of important manufactures here. Some of the houses have the appearance of magnificence. It is central to a delightful and populous country, and is entirely an interior town, twenty miles east of Lexington, sixty miles south-east of Newport, opposite Cincinnati, and in north latitude $38^{\circ} 18'$. The scenery of no place in the western country surpasses that on the road between this place and Lexington.

Georgetown, the county town of Scott county, is surrounded by that fine and rich country in the centre of this state, of which travellers have spoken in terms of so much praise. Royal spring, a branch of Elkhorn, runs through the town. It has a number of considerable manufacturing establishments, gontee houses, and some public buildings, among them a church, printing office, post office, and rope walk. It is fourteen miles north of Lexington, on the road to Cincinnati.

Harrodsburg is a pretty village on both sides of Salt river, which turns a number of mills. It contains ninety houses, with the customary stores, a church and post office. Danville, thirty-three miles south-west from Lexington, is an important village, containing between two and three hundred houses, and all the usual appendages of a town of that size. Stamford, 10 miles south-east from Danville, contains one hundred and twenty houses. Somerset, twelve miles south-east of Stamford, contains nearly one hundred houses. Monticello, between Cumberland river and

the state of Tennessee, situated on a ridge of hills, contains something more than sixty houses, and is in the vicinity of the noted nitre caves. Lead ore has been found in its vicinity.

Versailles, the chief town of Woodford county, contains over one hundred houses, and is situated on a creek which discharges into the Kentucky river. It is thirteen miles south-west from Lexington, and surrounded by the same beautiful country which is adjacent to that place. Sholbyville, on Brashcare's creek, twelve miles above its junction with Salt river, is a considerable village. Augusta, twenty-four miles below Maysville, on the Ohio, has eighty houses, and nine hundred inhabitants. Augusta College is a seminary of rising importance, under the care of the Methodist church. The college buildings consist of one spacious edifice, eighty feet by forty, and two boarding houses. It has an average of 137 students. The village is pleasant and uncommonly healthy. The president has deserved reputation, and this institution promises great utility to the community.

Newport, opposite to Cincinnati, is the county town for Campbell county, and is situated at the mouth of Licking. It has a charming prospect of Cincinnati, and the surrounding country, and from that town, seems a pleasure ground dotted with houses. Few places can show more pleasing scenery. It has a spacious arsenal, containing arms, and munitions of war for the United States, and some other public buildings, jail, market house, post office, school house, and an academy. Bagging, cordage, and tobacco are manufactured here.

Covington, situated below Newport, and on the opposite side of Licking, is laid out with great regularity. The streets are intended to be continuations of those of Cincinnati. Liberal donations are made for the erection of public buildings. Nothing can exceed the beauty of a panoramic view of these towns, from the hills north of Cincinnati. The Ohio, in the distance, seems but a rivulet, and these towns are so connected by the eye, as to seem to make a part of Cincinnati. These places of course are connected with Cincinnati in business; and only want a bridge across the Ohio, or a tunnel under it, actually to make a part of Cincinnati. In this place are respectable manufacturing establishments, particularly of cotton.

Cynthiana, the county town for Harrison county, stands on the north-east bank of the south fork of Licking, twenty-six miles north-east from Lexington, and thirty-four in the same direction from Frankfort. It contains more than one hundred houses; and a number of respectable public buildings. It is on a wide and fertile bottom, in the midst of a rich and populous settlement. There are a great number of water mills near the town.

Port William, the county town of Gallatin county, stands on the right shore of the Kentucky, a little above its entrance into the Ohio. It contains sixty or seventy houses. But although its position is fine, at the outlet of this noble river, and adjacent to a charming country, it has not flourished according to the expectations of its inhabitants. This may be owing to the circumstance, that the delta on which it is situated has been sometimes inundated.

Russellville, the county town of Logan county, is an interior town, intermediate between Green and Cumberland rivers; and thirty-five miles distant from each. It contains a seminary, denominated a college; and a number of respectable public buildings, together with one hundred and sixty private houses. It is one hundred and eighty miles south-west from Frankfort, and thirty-five south of Louisville. It is in the vicinity of the extensive prairies and barrens that appear in this part of the country. Salt licks abound near the town. Many of the adjacent prairies are of great beauty.

There are forty or fifty more considerable villages in this state, all indicated in the tabular view of the county towns of this state. It would be but tiresome repetition to describe them with any degree of particularity. The names of the principal ones follow, together with the rivers on which they are situated. Catlettsburg, at the outlet of Big Sandy. Clarksburg, on the Ohio, forty-eight miles below Catlettsburg. Yellow Banks, Henderson, Morganfield, and Smithland, are on the Ohio, below Louisville. The last named town is at the mouth of Cumberland river. Columbia is on the south bank of the Mississippi, eleven miles below the mouth of the Ohio. Prestonburg is on the west branch of Big Sandy, near the Cumberland mountains. The following towns are on Licking: Olympian Springs, Mount Sterling, Millersburg, Marysville, and Falmouth. On the Kentucky and its waters, besides those already enumerated, are Mount Vernon, Stamford, Lancaster, Richmond, Winchester, Nicholasville, Harrodsburg, and Laurensburg. On Salt river and its waters, are Springfield, Bealsburg, Shelbyville, Middletown, and Shepherdsville. Bardstown is an important village, with a beautiful view of adjacent hills and mountains. On Green river and its waters, are Caseyville, Columbia, Greensburg, Summerville, Monroe, Glasgow, Scotsville, Bowling Green, Morgantown, Litchfield, Hardensburg, Hartford, Greenville, and Madisonville. On Cumberland river, Barboursville, Burkville, Hopkinsville, Princeton, and Centreville. Some of these villages have churches. Some of them are county towns; and in a country where the whole scene is shifting under the eye of the beholder; some of them, no doubt, are more important than some of those which we have particularly noticed in description. Other villages may have become impor-

tant, that have not yet been described; and there are villages deemed of consequence, at least in their immediate vicinity, which are not here named.

Education. Beside the collegiate institutions already mentioned, there is Georgetown College, a Baptist seminary, recently commenced at Georgetown, and Cumberland College at Princetown. This is an institution for the Cumberland Presbyterians; the students, on an average, are one hundred and twenty. It is respectable for its library and endowments, and adopts the manual labor system. Centre College at Danville, is under the care of the Presbyterian church. Its buildings and endowments, are already ample, and are increasing. It promises to become an important institution.

In the pleasant village of Bardstown, is a highly respectable Catholic Seminary, being the most important one which that church possesses in the western country. One object of this institution is to have theological students for the Catholic ministry. In the college and theological school are two hundred and thirty students. A number of persons of both sexes, and the different religious orders of that church, reside here, and are devoted to teaching and acts of charity.

There are other seminaries, the names and positions of which we have not been able to obtain. But we give instead a most important document, touching the state of general education in Kentucky. We regret that it is the only one furnished by the census of 1830, of sufficient accuracy and universality to qualify it for admission to this work. It may stand in some degree, as a sample of the condition of general education in the states where free schools are not yet adopted. The system has one obvious advantage over that of New England. The teachers, for the most part, are trained to their profession, and consider it not an incidental but a perpetual pursuit. They acquire an experience, talent of government, and power of self possession, which cannot be expected from those who adopt the profession only as an expedient, and for a season. It differs in another respect from that of New England. There the greater number of pupils attend school in winter; and here in the summer.

Name of County.	Number of Schools.	Children at School.	No. in co. between 5 and 15.	Number not at School.	Average size of Schools.	Population of each County.
Adair,	13	292	1820	1528	22	
Allen,	12	286	1642	1356	24	
Anderson,	9	302	946	644	33	
Barren,	24	644	3222	2578	27	
Bath,	15	453	2002	1549	30	
Boone,	19	599	1955	1356	31	
Bourbon,	48	1246	3019	1773	26	
Bracken,	12	325	1587	1262	27	
Brackenridge,	16	400	1715	1315	25	
Bullitt,						
Butler,	7	158	768	610	22	
Callaway,	11	245	1382	1137	22	
Campbell,	17	453	2616	2165	21	
Casey,	6	120	1154	1023	21	
Caldwell,	16	453	1833	1380	28	
Christian,	20	624	2334	1710	31	
Clark,	21	810	2423	1613	40	
Clay,	3	51	959	908	17	
Cumberland,	9	241	2005	1764	27	
Daviess,	9	229	1069	840	25	
Edmonson,	2	62	727	665	31	
Estill,						
Fayette,*	*39	1122	2925	1803	29	
Fleming,	28	870	3870	3000	31	
Floyd,	6	151	1307	1156	25	
Franklin,	16	485	1629	1144	30	
Gallatin,	14	394	1618	1221	28	
Garrard,	20	459	2301	1842	23	
Grant,	9	296	816	520	33	
Graves,	4	102	645	543	25	
Grayson,	8	252	1080	828	31	
Greene,	14	329	2358	2529	23	
Greenup,	9	270	1541	1271	30	
Hancock,	3	86	327	241	29	
Hardin,	23	693	3234	2541	30	
Harland,	3	64	841	777	21	
Harrison,	24	835	3000	2165	34	
Hart,	6	155	1372	1217	26	
Henderson,	12	243	1153	910	20	
Henry,	53	606	2521	1915	26	
Hickman,	5	127	1269	1142	25	
Hopkins,	13	260	1587	1327	20	
Jefferson,						
Jessamine,	18	520	1789	1269	29	
Knox,	4	113	1104	991	28	
Laurel,	2	41	582	541	20	
Lawrence,	9	179	1124	945	19	
Lewis,	9	242	1365	1123	27	

*Out of Lexington.

Name of County.	Number of Schools.	Children at School.	No. in co. between 5 and 15.	Number not at School.	Average size of Schools.	Population of each County.
Lincoln,	24	537	2028	1491	22	
Livingston,						
Logan,	16	390	2331	1941	23	
Mason,	39	1180	3050	1900	30	
Madison,	33	1054	3446	2392	32	
Mercer,						
Mead,	8	226	896	640	32	
McCracken,	30	1013	3441	2398	28	
Monroe,	7	252	1483	1231	36	
Montgomery,	15	551	2146	1595	36	
Morgan,	00	000	893	893		
Muhlenburgh,	12	258	1248	990	21	
Nelson,	23	807	2873	2066	35	
Nicholas,	16	612	2180	1568	38	
Ohio,	7	168	1121	953	24	
Oldham,	17	446	1984	1538	26	
Owen,	12	299	1468	1169	25	
Pendleton,	8	318	1026	708	39	
Perry,	3	52	992	940	17	
Pike,	3	53	785	732	17	
Pulaski,	23	589	2438	1879	25	
Rock Castle,	7	145	784	639	21	
Russell,	1	28	926	898	28	
Scott,	18	690	2525	1835	38	
Shelby,	43	1125	3704	2579	26	
Simpson,	12	393	1418	1025	33	
Spencer,	12	282	1544	1262	23	
Todd,	16	363	1471	1108	22	
Trigg,	13	318	1294	976	24	
Union,	8	252	923	691	31	
Warren,	13	405	2291	1886	31	
Washington,	34	907	4119	3212	26	
Wayne,	9	307	2350	2043	34	
Whitely,	7	195	1086	891	28	
Woodford,	23	666	1812	1446	29	
Total,	1131	31834	139142	107328		

Name of County.	Am't. now paid for education.	Average price of tuition.	Cost of educating all at this rate.	Average income of Teachers.	Pay of teachers, supposing 40 pupils to a school.
Adair,	\$2259	\$7 75	\$14105	\$173	\$310
Allen,	2178	7 50	10170	181	300
Anderson,	2480	8 20	7757	275	328
Barren,	5608	8 40	27064	275	336
Bath,	3281	7 25	14514	219	290
Boone,	5136	8 57	16754	270	342
Bourbon,	12134	9 73	20377	253	389
Bracken,	2380	7 25	11505	197	290
Brackenridge,	3452	8 63	14800	216	345

Name of County.	Am't now paid for education.	Average price of tuition.	Cost of educa- tion all at this rate.	Average income of teachers.	Pay of teachers, supposing 40 pu- pils to a school.
Bullitt,	1289	8 15	6259	184	326
Butler,	2084	8 51	11760	190	340
Calloway,	3188	7 03	18390	187	281
Campbell,	872	6 92	7985	145	276
Casey,	4276	9 46	17330	267	378
Caldwell,	6093	9 76	22779	304	390
Christian,	6383	7 88	19093	304	315
Clarke,	540	10 59	10155	120	423
Clay,	2044	8 48	17002	227	339
Cumberland,	2140	9 34	9984	238	373
Daviess,	744	12 00	8724	372	480
Edmondson,					
Estill,					
Fayette,	11467	10 22	29893	300	408
Fleming,	6192	7 12	27554	221	284
Floyd,	1208	8 00	10456	201	320
Franklin,	4032	9 56	15573	289	382
Gallatin,	3167	8 03	12992	226	321
Garrard,	3945	8 59	19765	197	353
Grant,	2105	7 11	5801	234	284
Graves,	1020	10 00	6450	255	400
Grayson,	2140	8 49	9169	267	339
Greene,	3314	10 07	28780	237	402
Greenup,	2418	8 95	13791	268	352
Hancock,	814	9 46	3093	271	378
Hardin,	6372	9 19	29720	277	367
Harlan,	642	10 03	8435	214	401
Harrison,	7373	8 82	26460	307	352
Hart,	1381	8 90	12210	230	356
Henderson,	2896	11 09	12786	241	443
Henry,	4557	7 51	18932	198	300
Hickman,	1112	8 75	11103	222	350
Hopkins,	2240	8 62	13679	172	344
Jefferson,					
Jessamine,	4416	8 49	15188	452	339
Knox,	1038	9 18	10134	259	367
Laurel,	328	8 00	4656	164	320
Lawrence,	1346	7 52	8452	149	300
Lewis,	1686	6 97	9515	187	278
Lincoln,	4896	9 11	18475	203	364
Livingston,					
Logan,	5046	12 91	30093	315	516
Mason,	11089	9 57	29475	284	382
Madison,	8197	7 77	26775	248	310
McCracken,					
Mead,	1984	7 75	6944	248	310
Mercer,	9737	9 33	32104	250	373
Monroe,	1976	7 84	11626	282	313

Name of County.	Am't now paid for education.	Average price of tuition.	Cost of educating all at this rate.	Average income of teachers.	Pay of teachers, supposing forty pupils to a school.
Montgomery,	\$1251	\$7 71	\$16545	\$283	\$308
Morgan,					
Muhlenburgh,	1900	7 36	9185	156	294
Nelson,	8320	10 31	29610	362	412
Nicholas,	4435	7 26	15826	277	200
Ohio,	1485	8 84	9909	212	353
Oldham,	3689	8 27	16407	217	330
Owen,	2108	7 05	10348	175	282
Pendleton,	2379	7 48	7674	297	299
Perry,	498	9 58	9503	162	383
Pike,	464	8 75	6868	155	350
Pulaski,	4038	6 74	16432	175	269
Rock Castle,	1200	8 28	6491	177	331
Russell,	224	8 00	7408	224	320
Scott,	7288	10 56	26664	404	422
Shelby,	8852	7 86	29113	206	314
Simpson,	3613	9 19	13031	301	367
Spencer,	2176	7 71	11904	181	308
Todd,	3724	10 25	15077	233	410
Trigg,	3053	9 81	12694	228	392
Union,	2470	9 80	9045	308	392
Warren,	3112	7 68	17594	239	307
Washington,	8551	9 42	38800	251	376
Wayne,	2650	8 63	20380	294	345
Whitely,	1433	7 35	7882	204	294
Woodford,	7378	11 08	20036	321	443
Total,	278592		1200052		

Curiosities, &c. Among the antiquities of this state are great numbers of those Indian mounds, that are found over all the western country. When this country was first discovered, great numbers of human bodies, in a state of entire preservation, were found in a cave near Lexington. The pioneers of the settlements in this country did not attach much consequence to skeletons, and none of them remain. The bodies that were found in the Saltpetre cave, have been examined by thousands. They were considerably smaller than the men of our times. The teeth and nails did not seem to intimate the shrinking of the flesh from them, in the desiccating process, by which they had been preserved. The teeth were separated by considerable intervals, and were long, white, and sharp.

In an ancient mound on Caney Fork of Cumberland river, four feet below the surface, a vessel was found, of which it would be difficult to convey an adequate idea, without an engraving. It consisted of three heads, joined together at the back part of them near the top, by a stem

or handle, which rises above the heads about three inches. The stem is hollow, six inches in circumference at the top, increasing in size as it descends. These heads are all of the same dimensions, being about four inches from the apex to the chin. The face at the eyes is three inches broad, decreasing in breadth all the way to the chin. Most persons have supposed that they are fac similes of the Tartar countenance. They do not so strike us. Neither does their model appear to have been any thing like the present Indian countenance. The faces are remarkable for their fullness, and evince no inconsiderable skill in the moulder. It is of the common earthen fabric of the pottery generally found about the mounds.

In another mound, within twenty miles of Lexington, were found nine very large and beautiful marine shells of the murex class, and perfectly similar, in their general contour, to those called conch shells. They have all the freshness of those found on the shores of the sea. This state, like Tennessee, abounds in lime stone caves, of an extent and grandeur to which the famous cave at Antiparos will hold no comparison.

There are numberless caves, sinks, and precipices, that in any other country would be regarded as curiosities. They are sources of wealth in many instances to their proprietors. No earth, in any country, has been found more strongly impregnated with nitre. It is affirmed that fifty pounds of crude nitre have been extracted from an hundred pounds of the earth. During the late war, four hundred thousand pounds a year were manufactured from this earth in this state; and probably as great an amount of gunpowder. We have already mentioned, as striking curiosities, the prodigious depths in which many of the rivers in this state run, which are worn through strata of solid lime stone. The caves, the sink holes, the gulfs, and the deeply excavated beds of the rivers, afford a continual source of curiosity and astonishment to travellers, who are not thoroughly used to this country.

Character, Manners, &c. The people of this state have a character as strongly marked by nationality, as those of any state of the union. It is a character extremely difficult to describe, although all the shades of it are strongly marked to the eye of a person who has been long acquainted with them. They are not only unique in their manners, but in their origin. They are scions from a noble stock—the descendants from affluent and respectable planters from Virginia and North Carolina. They are in that condition in life, which is perhaps best calculated to develop high-mindedness and self respect. They have a distinct and striking moral physiognomy, an enthusiasm, a vivacity and ardor of character, courage, frankness, and generosity, that have been developed with the peculiar circumstances under which they have been placed.

They have a delightful frankness of hospitality, which renders a sojourn among them exceedingly pleasant to a stranger. Their language, the very amusing dialect of the common people, their opinions and modes of thinking, from various circumstances, have been very extensively communicated, and impressed upon the general character of the people of the west. Their bravery has been evinced in field and forest from Louisiana to Canada. Their enthusiasm of character is very observable, in the ardor with which all classes of people express themselves in reference to their favorite views and opinions. All their feelings tend to extremes. It is not altogether in burlesque, that they are described as boastful, and accustomed to assume to themselves the best horse, dog, gun, wife, statesmen, and country. Their fearless ardor, and frankness, and self confidence, become to their young men, in other parts of the west, in competition for place and precedence, as a good star. When a Kentuckian presents himself in another state, as a candidate for an office, in competition with a candidate from another state, other circumstances being equal, the Kentuckian carries it. Wherever the Kentuckian travels, he earnestly and affectionately remembers his native hills and plains. His thoughts as incessantly turn towards home, as those of the Swiss. He invokes the genius of his country, in trouble, danger, and solitude. It is to him the home of plenty, beauty, greatness, and every thing that he desires, or respects. This nationality never deserts him. No country will bear a comparison with his country; no people with his people. English are said to go into battle with a song about roast beef in their mouths. When the Kentuckian encounters dangers of battle, or of any kind, when he is even on board a foundering ship, his last exclamation is, 'hurrah for old Kentucky.'

Religion. The prevailing denominations are Baptists, Presbyterians, Methodists, Cumberland Presbyterians, and Seceders. The people manifest their excitable and ardent character upon this, as upon all other subjects. They have an insatiable curiosity to hear new preachers, and an extreme eagerness for novelty. Religious excitements are common and carried to the highest point of emotion. Religion, in some form, seems to be generally respected; and there is scarcely a village or a populous settlement in the state, that has not one, or more, favorite preachers. It would be difficult to say which is the predominant denomination, that of the Baptists, Methodists, or Presbyterians. But notwithstanding the marked enthusiasm of the character of this people, notwithstanding they are much addicted to bitter political disputation, notwithstanding all the collisions from opposing parties and clans, as a state, the people have uniformly distinguished themselves for religious order, quiet, and tolerance.

Constitution, Government, &c. The legislative power is divided as usual. The senators are elected for four years, and the representatives for one. A person to be eligible as a senator, must be thirty-five years of age, a citizen of the United States, must have resided six years in the state, and one year in the district for which he is chosen. A representative must be twenty-four years of age, a citizen of the United States, must have resided in the state two years, and in the district one. The governor is elected for four years, and is eligible four years out of eleven. He must be thirty years of age, a citizen of the United States, and must have resided in the state two years. He has a qualified negative upon the proceedings of the assembly, has a pardoning power, and makes appointments with the consent of the senate. The judiciary consists in a supreme court, and in such inferior courts as the assembly may appoint, and the judges retain their offices during good behaviour. Every free white male citizen of the age of twenty-one, who has resided in the state two years, or one year in the district, is entitled to the elective franchise.

INDIANA.

LENGTH, 250. Breadth, 150 miles. Between $37^{\circ} 47'$ and $41^{\circ} 50' N.$ latitude, and $7^{\circ} 45'$ and $11^{\circ} W.$ longitude. Bounded north by Michigan territory and lake Michigan; west by the state of Illinois; south by the Ohio, which divides it from Kentucky; east by the state of Ohio.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>Chief Towns.</i>
Allen,	Port Wayne,
Bartholomew,	Columbus,
Boone,	
Carroll,	Delphi,
Cass,	Logansport,
Clark,	Charlestown,
Clay,	Bowling Green,
Clinton,	
Crawford,	Fredonia,
Daviess,	Washington,
Dearborn,	Lawrenceburgh,
Delaware,	
Decatur,	Greensburgh,
Dubois,	Barbersville,
Elkhart,	
Fayette,	Connersville,
Floyd,	New Albany,
Fountain,	Covington,
Franklin,	Brookville,
Gibson,	Princeton,
Greene,	Bloomfield,
Grant,	
Hamilton,	Noblesville,

Hancock,
Harrison,
Henry,
Hendricks,
Jackson,
Jefferson,
Jennings,
Johnson,
Knox,
Lawrence,
Madison,
Marion,
Martin
Monroe,
Montgomery,
Morgan,
Orange,
Owen,
Parke,
Perry,
Pike,
Posey,
Putnam,
Randolph,
Ripley,
Rush,
Scott,
Shelby,
Spencer,
St. Joseph,
Sullivan,
Switzerland,
Tippicanoe,
Union,
Vanderburgh,
Vermillion,
Vigo,
Wabash,
Warren,
Warrich,
Washington,
Wayne,

Corydon,
New Castle,
Danville,
Brownstown,
Madison,
Vernon,
Franklin,
Vincennes,
Bedford,
Andersontown,
Indianapolis,
Mount Pleasant,
Bloomington,
Crawfordsville,
Martinsville,
Pavli
Spencer,
Rockville,
Rome,
Petersburgh,
Mt. Vernon & Harmony,
Green Castle,
Winchester,
Versailles,
Rushville,
Lexington,
Shelbyville,
Rockport,

Merom,
Vevay,
Lafayette,
Liberty,
Evansville,
Newport,
Terrehaute,

Booneville,
Salem,
Centreville & Richmond.

The whole of this state belongs to the valley of the Ohio, or lake Michigan. It is the first of the states, in advancing from the west, east, and north, where nature seems to have divided the surface between prairie and wood land. The greater proportion of this state is a timbered country. Here, too, we first find the number and manners of northern people predominating among the immigrants. Here we first discover, in most places, a clear ascendancy of New England dialect, manners, and population. Here, too, we note the natural tendency of this order of things, and this class of immigrants rapidly, and yet silently filling the country with inhabitants. Missouri and Illinois have occupied a greater space in public estimation, in newspaper description, and in general notoriety. The immigration to these states has been with four or six horse wagons, large droves of cattle, considerable numbers of negroes, and composed of immigrants who had name, and were heads of families when they removed, and whose immigration was accompanied with a certain degree of eclat. The acquisition of a few families was attended with circumstances, which gave it public notoriety. The settling of this state has been generally of a different character, and for the most part of young men, either unmarried or without families. It has been noiseless and unnoticed. But the difference of the result strikes us with surprise. While the population of neither of these states has reached one hundred and fifty thousand, the population of this state, at this time, is supposed to exceed four hundred thousand, though the total given by the census is three hundred and forty four thousand;—of these sixty-five thousand three hundred and fifty-nine are free white male inhabitants over 21 years. The number of voters in 1825, was thirty-six thousand nine hundred and seventy-seven, and of paupers two hundred and seventeen.

Face of the Country, Soil, &c. The south front is skirted with the usual belt of river hills, bluffs, and knobs, known by the name of 'Ohio hills.' They occupy a greater or less distance from the river; sometimes leaving between it and their base a bottom of two or three miles in width; and sometimes, and for no inconsiderable length of the southern boundary, they tower directly from the waters of the Ohio, and have a thousand aspects of grandeur and beauty, often rising higher than three hundred feet above the level of the river. The eye of the southern traveller, ascending the Ohio, which has been used to rest on bottoms boundless to vision, on swamps, and regions without a rock or a hill in the scenery, never tires, in surveying these beautiful bluffs, especially in the spring, when their declivities are crimsoned with the red bud, or whitened with the brilliant blossoms of the dogwood, or rendered verdant with the beautiful May apple.

A range of knobs, stretching from the Ohio to White river of the Wabash, forms the limits of the table lands, that separate the waters of the Ohio from those of White river. North of the Wabash, between Tippicanoe and Ouitanon, the Wabash hills are precipitous, and a considerable extent of country is rough and broken. There are in different parts of the state, large extents of country that may be pronounced hilly. Such is the south front of the state to a considerable distance from the Ohio. There are not such extensive plains in this state, as in Illinois. Nor are there any hills to vie with those back of Shawneetown. But with some few exceptions, the greater proportion of this state may be pronounced one vast level. To particularize the level tracts would be to describe three-fifths of the state. The prairies here, as elsewhere, are uniformly level. The wide extent of country, watered by White river, is generally level. The prairies have the usual distinction of high and low, swampy and alluvial. For a wide extent on the north front of the state, between the Wabash and lake Michigan, the country is generally an extended plain, alternately prairie and timbered land, with a great proportion of swampy lands, and small lakes and ponds. The prairies are no ways different from those of Illinois; alike rich, level, and covered with grass and flowering plants. Some, like those of Illinois and Missouri, are broader than can be measured by the eye. Their divisions are marked off wherever streams cross them by belts of timbered land. All the rivers of this state have remarkably wide alluvions. Every traveller has spoken with admiration of the beauty and fertility of the prairies along the course of the Wabash, particularly of those in the vicinity of Fort Harrison. Competent judges prefer the prairies on this part of the river, both for beauty and fertility, to those of the Illinois, and the Upper Mississippi. Perhaps no part of the western world can show greater extents of rich land in one body, than that portion of White river country, of which Indianapolis is the centre. Judging of Indiana, from travelling through the south front from twelve to twenty miles from the Ohio, we should not, probably, compare it with Ohio or Illinois. But now, when the greater part of the territory is purchased of the Indians, and all is surveyed, and well understood, it is found that this state possesses as large a proportion of first rate lands as any in the western country. With some few exceptions of wide prairies, the divisions of timbered and prairie lands are more happily balanced, than in other parts of the western country. Many rich prairies are long and narrow, so that the whole can be taken up, and timber be easily accessible by all the settlers. There are hundreds of prairies only large enough for a few farms. Even in the large prairies are those beautiful islands of timbered land, which form such a striking feature in the western prairies. The great extents of fertile land, the happy distribution of rivers and

springs may be one cause of the unexampled rapidity, with which this state has peopled. Another reason may be, that being a non-slave-holding state, and next in position beyond Ohio, it was happily situated to arrest the tide of immigration that set beyond Ohio, after that state was filled.

We add a few remarks in a single view, upon the qualities of the soil, on the several rivers, and near the towns, which we shall describe. The forest trees, shrubs, plants, and grasses, do not materially differ from those of Illinois and Missouri. There is one specific difference, that should be noted. There is a much greater proportion of beech timber, which increases so much as we advance east, that in Ohio it is clearly the principal kind of timber. This state is equally fertile in corn, rye, oats, barley, wheat, and the cereal gramina in general. Vast extents of the richer prairies and bottoms are too rich for wheat, until the natural wild luxuriance in the soil has been reduced by cropping. Upland rice has been attempted with success. Some of the warm and sheltered valleys have yielded, in favorable years, considerable crops of cotton. No country can exceed this in its adaptedness for rearing the finest fruits and fruit bearing shrubs. Wild berries in many places are abundant; and on some of the prairies the strawberries are large and fine. It is affirmed that in the northern parts in the low prairies, whole tracts are covered with the beautiful foul-meadow grass, *poa pratensis*, of the north. It is a certain fact, that wherever the Indians or the French have inhabited long enough to destroy the natural prairie grass, which, it is well known, is soon eradicated, by being pastured by the domestic animals that surround a farmer's barn, this grass is replaced by the blue grass of the western country, which furnishes not only a beautiful sward, but covers the earth with a mat of rich fodder, not unlike the second crop, which is cut in the northern states, as the most valuable kind of hay. For all the objects of farming, and raising grain, flour, hemp, tobacco, cattle, sheep, swine, horses, and generally the articles of the northern and middle states, immigrants could not desire a better country than may be found in Indiana. In the rich bottoms in the southern parts, the reed cane, and uncommonly large ginseng are abundant.

Climate, &c. Little need be said upon this head, for this state, situated in nearly the same parallels with Illinois and Missouri, has much the same temperature. That part of it which is contiguous to lake Michigan, is more subject to copious rains; and being otherwise low and marshy, much of the land is too wet for cultivation. Some have described the country and climate near lake Michigan, as productive and delightful. For a considerable distance from the lake, sand heaps covered with a few stunted junipers, and swept by the gales of the lake, give no promise of a fine country or climate. But beyond the influence of the lake breeze,

the climate is cool, mild, and temperate. The state, in general, is somewhat less exposed to the extremes of heat and cold, than Illinois.

In point of salubrity, we can do no more than repeat the remarks, which have so often been found applicable to the western country in general, and which from the nature of things, must apply to all countries. The high and rolling regions of this state are as healthy as the same kinds of land in the other parts of the United States. The wet prairies, swampy lands, and tracts contiguous to small lakes and ponds, and inundated bottoms, intersected by bayous, generate fever and ague, and autumnal fevers, and impart a bilious tendency to all the disorders of the country. The beautiful prairies above Vincennes, on the Wabash, in the neighborhood of Fort Harrison and Tippicanoe, are found to have some balance against their fertility, beauty of appearance, and the ease with which they are cultivated, in their insalubrity. That the settlers in general have found this state, taken as a whole, favorable to health, the astonishing increase of the population bears ample testimony.

The winters are mild, compared with those of New England or Pennsylvania. Winter commences in its severity about Christmas, and lasts seldom more than six weeks. During this time, in most seasons, the rivers that have not very rapid currents are frozen. Though winters occur in which the Wabash cannot be crossed upon the ice. About the middle of February, the severity of winter is past. In the northern parts of the state, snow sometimes, though rarely, falls a foot and a half in depth. In the middle and southern parts, it seldom falls more than six inches. Peach trees are generally in blossom early in March. The forests begin to be green from the fifth to the fifteenth of April. Vast numbers of flowering shrubs are in full flower, before they are in leaf, which gives an inexpressible charm to the early appearance of spring. Vegetation is liable to be injured both by early and late frosts.

Rivers. The southern shore of this state is washed by the Ohio, from the mouth of the Big Miami to that of the Wabash, a distance of nearly five hundred miles, by the meanders of the river. We reserve a description of this noble stream for our account of the state of Ohio. Between the Miami and the Wabash, the following considerable streams, together with many small ones, enter the Ohio. Tanner's creek falls in two miles below Lawrenceburgh, and has a course of thirty miles. Loughery's creek enters eleven miles below the Miami, and is forty miles in length. Indian creek, called by the Swiss, in remembrance of a stream in their native country, Venoge, bounds the Swiss settlements on the south, and enters the Ohio eight miles below the point opposite to Kentucky river. Wyandot, Big Blue, Little Blue, Anderson's river, Pigeon, and Beaver creeks enter in the order in which we have mentioned them, as we de-

scend the Ohio. In descending this distance, we discover the deep chasm through the banks of the Ohio, where a great many smaller streams enter. Many of these streams, at some distance from the Ohio, afford mill seats. We may therefore remark, that the south front of Indiana is well watered.

The Wabash is the chief river of this state; and after the Tennessee, one of the most considerable tributaries of the Ohio. It glides through the central parts of the state, and by its extensive branches, waters a vast extent of it. One of the main branches heads near Fort St. Mary's, in Darke county, Ohio. The next considerable branch, called Little river, heads seven miles south of Fort Wayne, and enters the Wabash eighty miles below St. Mary's Portage. The next is Massassineway, which also heads in Ohio, between forts Greenville and Recovery, and joins it a league and a half below the mouth of Little river. Eel river, another branch, rises in ponds and lakes, eighteen miles west of Fort Wayne, and joins the Wabash, eight miles below the mouth of the Massassineway. Rejoicing, Mascontin, Ouitanon, and Doche, are inconsiderable tributaries.

White river enters the Wabash from the eastern side, sixteen miles below Vincennes. It is the most considerable tributary of the Wabash; and one of the most important rivers in the state. It waters a great extent of very fertile country, in a lateral direction to the main stream. Its head waters interlock with the waters of the Miami. Its principal tributaries are Driftwood branch, Muddy Fork, and Tea-kettle branch.

Little river, St. Mary's, Rock river, and Pomme, are inconsiderable tributaries, that enter from the eastern side. It receives a great number of considerable tributaries from the west. Richard's creek and Rock river enter above Tippicanoe. This stream has acquired lasting fame by the bloody action which was fought upon its banks, between the United States' troops, under General Harrison, and the Wabash savages in November, 1811. It originates from many branches in ponds and lakes, which, like that at the source of the Plein of the Illinois, discharge at one extremity into the waters of the Wabash, and at the other into the Maumee of the lakes. Before the battle of Tippicanoe, the Indians had fields in high cultivation along the banks of this river. Below this river, from the west enter in succession, Pine, Redwood, Rejoicing, Little Vermillion, Erabliere, Dachotte, and Brouette rivers, which are inconsiderable streams that head in the state of Illinois.

White Water, is a branch of the Big Miami, and a very interesting river. It rises near Fort Greenville, in Ohio. Not far from its source it crosses into this state, and in its devious course, waters a large extent of fertile country. The West Fork unites with it at Brookville, 30 miles above its

entrance into the Miami. This beautiful stream is supposed to water nearly a million acres of land. It abounds in fine fish, and surpasses the other rivers of the country in the unusual transparency of waters. It has its sources in copious hill springs, and its waters are uncommonly cold. The people in its vicinity have an idea that its waters are too much wanting in specific gravity, or too little buoyant, for ordinary swimmers to trust themselves to bathe in it.

The northern front of the state, bordering on the territory of Michigan, and the lake of that name, is watered copiously by rivers, that empty into that lake and lake Erie. The principal of these are St. Joseph of the Maumee of the lakes, and its numerous branches, the river Raisin of lake Erie, Black river of lake Michigan, with its numerous branches; Chemin, Big and Little Kenomic, all of that lake; and Theakiki, Kickapoo, Plcin, and the Vermillion of Illinois. These numerous rivers generally have short courses, and carry large volumes of water. Most of them originate in ponds and lakes, of which an hundred exist along the northern frontier. Many have the peculiar character of such waters in this region, that is to say, a position on an elevated plateau, from one extremity of which the waters discharge into the lakes, and from the other into the waters of the Mississippi.

Although this state has not so great an extent of inland navigation as Illinois, the amount of that navigation is very great. Many of its waters interlock with those of the Illinois. It possesses the whole extent of the noble Wabash, and White river and its numerous boatable branches. By these large marshy ponds, which at once discharge into lake Michigan and Erie, on the one hand, and the gulf of Mexico on the other, with a small expense of money and labor, the lakes will be united by canals with the Ohio and Illinois. A navigable canal already connects the White Water by the Big Miami with the Ohio, at Cincinnati. This state, so rapidly becoming populous, is the younger sister of Ohio, and will soon dispute the point of population and importance. It will ere long emulate the enterprise, the canals, and great public works of its model. By the lakes the northern frontier is already connected with Canada and New York. The whole extent of the inland navigation may be fairly rated at five thousand miles.

Chief Towns. Character of the country in which they are situated. The tabular view of county towns presents the names of the most considerable villages in the state. To mention, in detail, all that have really attained some degree of consequence, would only furnish a barren catalogue of names. We will mention the chief of those on the Ohio, in descending order, beginning with Lawrenceburgh, on the south-eastern angle of the state.

This town, the seat of justice, for the county of Dearborn, stands on the north bank of the Ohio, twenty-three miles below Cincinnati, and two miles below the Big Miami, the eastern limit of the state. It is in the centre of a rich bottom. The ancient village was built on the first bottom, which was frequently exposed to inundation. It was not uncommon for the water to rise four or five feet above the foundations of the houses, in which case the inhabitants removed to the upper story, and drove their domestic animals to the hills. Visits and tea parties were projected in the inundated town, and the vehicles of transport skiffs and periogues. The period of the flood, from ancient custom, and the suspension of all the customary pursuits, became a time of carnival. The floods, instead of creating disease, wash the surface of the earth, carry off vegetable and animal matter, and are supposed to be rather conducive to health than otherwise. The old town, built on the first bank, had been stationary for many years. New Lawrenceburgh has been recently built on the second bank, and on elevated ground, formed by the bank of Tanner's creek. Since the commencement of this town, few places have made more rapid progress. Many of the new houses are handsome, and some of them make a handsome show from the river. Its position, in relation to the river, the rich adjacent country, and the Big Miami, is highly eligible. It has a number of respectable commencing manufactories, and promises to be a large town. It contains one thousand inhabitants.

Aurora is a new village, at the mouth of Hogan creek, four miles below, on the Ohio. It contains between sixty and seventy dwellings.

Rising Sun, thirteen miles below Lawrenceburgh, occupies a beautiful position on the Ohio, and is a village something larger than Aurora.

Vevay, the seat of justice for Switzerland county, is situated eight miles above the point, opposite the mouth of Kentucky river, and forty-five miles below Cincinnati. It contains between two and three hundred houses, a court house, jail, academy, printing office, from which issues a weekly journal, a branch of the Bank of Indiana, and some other public buildings. This interesting town was commenced in 1804, by thirty Swiss families, to whom the United States made a grant, under favorable stipulations, of a considerable tract of land, to patronize the cultivation of the vine. The patriarch of this colony was a Swiss gentleman of the name of J. J. Dufour, who continued an intelligent friend to the town. The colony soon received considerable accessions from the mountains of Switzerland. In grateful remembrance of their native hills, and to create in the bosom of their adopted country tender associations with their ancient country, they named their stream Venoge, and their town Vevay. Messrs. Dufour, Morerod, Bettens, Siebenthal, and others, commenced the cultivation of the grape on a large scale. This cultivation has gone

on, steadily increasing. An hundred experiments have been since commenced in different points of the west. But this still remains the largest vineyard in the United States. We have witnessed nothing in our country, in the department of gardening and cultivation, which can compare with the richness of this vineyard, in the autumn, when the clusters are in maturity. Words feebly paint such a spectacle. The horn of plenty seems to have been emptied in the production of this rich fruit. We principally remarked the blue or Cape grape, and the Madeira grape. The wine of the former has been preferred to the claret of Bordeaux. The fruit tends to become too succulent and abundant. It is now supposed that some of our native grapes will more easily acclimate, and make a better wine. These amiable and industrious people are constantly profiting by experience. This species of agriculture already yields them a better profit than any other practised in our country. They are every year improving on the vintage of the past. They are the simple and interesting inhabitants that we might expect, from the prepossessions of early reading, to find from the vine clad hills of Switzerland. They are mostly protestants, and happily compound the vivacity of the French with the industry of the Germans. Like the former they love gaiety and dancing. Like the latter, they easily fall in with the spirit of our institutions, love our country and its laws, intermarry with our people, and are in all respects a most amiable people. There is a considerable number of professional men in Vevay, a public library, a literary society, and many of the comforts and improvements of a town. Mr. Dufour has distinguished himself by agricultural publications, particularly upon the culture of the vine. This industrious people have created some manufactures peculiar to themselves, particularly that of straw bonnets. The position of the town is fortunate, in relation to the back country, and the other interior large towns.

Madison, the most populous, and one of the pleasantest and most thriving towns in the state, is situated on the Ohio, nearly equi-distant between Louisville and Cincinnati, and was commenced in 1811. In 1829 between forty and fifty brick buildings, many of them three stories, were added to the town; and the promise of future progress is equally great. Its position on the Ohio is peculiarly favorable, it being the point of the river nearest to Indianapolis, 84 miles from it, and the landing place for the imports from the Ohio to a number of the newly settled thriving counties. Besides churches and public buildings, it has twenty-five dry goods stores, many of them transacting an extensive business. A line of stages passes through it. It has two printing offices, and issues a respectable weekly gazette. It has an insurance company, and expects a branch of the United States Bank. It does a large business in exports

of the produce of the country, and is particularly noted for the quantity of pork barrelled here. It contains two thousand inhabitants.

New London ten miles lower on the river, and Charlestown, twenty-nine miles lower, and two miles back from the Ohio, are small villages. The land about the latter town was a grant of gratitude from Virginia to the brave General Clark and his soldiers, for their achievements at the close of the revolutionary war.

Jeffersonville is situated just above the falls of Ohio. The town of Louisville on the opposite shore, and the beautiful and rich country beyond, together with the broad and rapid river, forming whitening sheets and cascades from shore to shore, the display of steam boats, added to the high banks, the neat village, and the noble woods on the north bank, unite to render the scenery of this village uncommonly rich and diversified. It is a considerable and handsome village, with some houses that have a show of magnificence. It has a land office, a post office, a printing office, and some other public buildings. It was contemplated to canal the falls on this side of the river, and a company with a large capital was incorporated by the legislature. In 1819 the work was commenced, but has not been prosecuted with the success that was hoped. The completion of the canal on the opposite side, will probably merge this project, by rendering it useless. One of the *chutes* of the river, in low water, is near this shore; and experienced pilots, appointed by the state, are always in readiness to conduct boats over the falls. Clarksville is a small village just below this place.

New Albany, the seat of justice for Floyd county, is four and a half miles below Jeffersonville. The front street is three quarters of a mile in length, and makes a respectable appearance from the river. Many steam boats that cannot pass the falls, are laid up for repair at this place, during the summer. It has a convenient ship-yard for building steam boats, and is a thriving and busy village, containing one thousand nine hundred inhabitants.

Fredonia, Leavenworth, Rockport, and Evansville, occur as we descend the Ohio. The last is a village of some consequence. It is the landing place for immigrants, descending the Ohio, for the Wabash. It is at the mouth of Big Pigeon creek, fifty-four miles south of Vincennes, and forty-five above the mouth of the Wabash. Being about half way between the falls of Ohio and the mouth, it is a noted stopping place for steam boats.

Corrydon, the seat of justice for the county of Harrison, was for considerable time, the political metropolis of this state. It is distant twenty-three miles from Jeffersonville, and thirteen from the Ohio, and is situated in the forks of Indian creek. North of the town, spreads an extensive region of barrens, full of sink holes and lime stone caves.

Salem, on a small branch of Blue river, thirty-four miles north of Corydon, is a flourishing county town, containing more than one hundred houses. Brownstown, Paoli, and Washington, are inferior county towns. The following towns are on the Wabash, as we descend the river. Above Tippicanoe is the old French post of Ouitanon, at the head of boatable navigation on the river, in the centre of what was recently the country of the savages. Its origin dates back nearly one hundred years. The inhabitants are a mixture of French and Indian blood. Merom is on a high bluff of the Wabash opposite La Motte Prairie, in Illinois, and is in the centre of rich and beautiful prairies. It has peopled with great rapidity. *Terre Haute* is situated two miles below Fort Harrison, as its name imports, on a high bank of the Wabash. It is a growing and important village. Shaker Town, fifteen miles above Vincennes, contains a community of the industrious people called Shakers, and exhibits the marks of order and neatness, that so universally characterize this people.

Vincennes is, after Kaskaskia, the oldest place in the western world. It was settled in 1735, by French emigrants from Canada. They fixed themselves here in a beautiful, rich, and insulated spot, in the midst of deserts. For an ago they had little intercourse with any other people than savages. Their interests, pursuits, and feelings were identified with them. Their descendants are reclaimed from their savage propensities; and have the characteristic vivacity and politeness of the French people. It is one hundred and fifty miles above the mouth of the Wabash, and fifty-four from the nearest point of the Ohio. It has improved rapidly of late, and contains three hundred houses, a brick court house, and hotel, a jail, a respectable building for an academy, a Roman Catholic and a Presbyterian church, land office, post office, two printing offices, from one of which is issued a respectable gazette, a bank, and some other public buildings, and one thousand five hundred inhabitants. It is situated contiguous to a beautiful prairie, five thousand acres of which are cultivated as a common field, after the ancient French custom. It was for a long time the seat of the territorial government, and still has as much trade as any other place in the state. The plat of the town is level, and laid off with regularity. The houses have extensive gardens, crowded after the French fashion with fruit trees. It is accessible, for the greater part of the year, by steam boats; and is a place of extensive supply of merchandise to the interior of the state. Volney, who visited this place not long after the establishment of the federal government, gives a graphic and faithful account of the appearance of this place, and the adjoining country, the French inhabitants and their manners. At the same time he presents a revolting picture of the manner in which the Americans had treated them. Perhaps he had not learned that Vincennes had been for a

time a nest of savages, from which they fitted out their murderous expeditions; and that it was natural that the Kentuckians, who had suffered much from them, should retaliate upon the people who had harbored them. He represents them, subsequently, to have been cheated out of their lands by the Americans, and their ignorance so profound, that little more than half their number could read or write; and he avers that he could easily distinguish them, when mixed with the Americans, by their meagre and tanned faces, and their look of poverty and desolation. However just this picture may have been in 1796, it is reversed now. Most of the inhabitants have an air of ease and affluence; and Vincennes furnishes a pleasant and respectable society.

Harmony is fifty-four miles below Vincennes, and something more than one hundred by water above the mouth of the Wabash, on the east bank of the river, sixteen from the nearest point of the Ohio, on a rich and heavily timbered plateau, or second bottom. It is high, healthy, has a fertile soil, and is in the vicinity of small and rich prairies, and is a pleasant and well chosen position. It was first settled in 1814, by a religious sect of Germans denominated Harmonites. They were emigrants from Germany, and settled first on Beaver creek, in Pennsylvania. They moved in a body consisting of eight hundred souls to this place. Their spiritual and temporal leader was George Rapp, and all the lands and possessions were held in his name. Their society seems to have been a kind of intermediate sect between the Shakers and Moravians. They held their property in common. Their regulations were extremely strict and severe. In their order, industry, neatness, and perfect subordination, they resembled the Shakers. They soon erected from eighty to one hundred large and substantial buildings. Their lands were laid off with the most perfect regularity, and were as right angled and square as compass could make them. They were wonderfully successful here, as they had been in other places, in converting a wilderness into a garden in a short time. They had even the luxury of a botanic garden and a green house. Their great house of assembly, with its wings and appendages, was nearly one hundred feet square. Here they lived, and labored in common, and in profound peace. But from some cause, their eyes were turned from the rich fields, and the wide prairies, and the more southern and temperate climate of the Wabash, towards Beaver creek, the place where they had first settled. While they were under the influence of these yearnings, the leader of a new sect came upon them. This was no other than Robert Owen, of New Lanark, in Scotland, a professed philosopher of a new school, who advocated new principles, and took new views of society. He denominated his theory 'The Social System.' He was opulent, and disposed to make a grand experiment of his

principles on the prairies of the Wabash, and purchased the land and village of Mr. Rapp, for one hundred and ninety thousand dollars. In a short time there were admitted to the new establishment from 7 to 800 persons. They danced all together, one night in every week, and had a concert of music in another. The Sabbath was occupied in the delivery and hearing of philosophical lectures. Two of Mr. Owen's sons and Mr. McClure joined him from Scotland. The society at New Harmony, as the place was called, excited a great deal of remark in every part of the United States. Great numbers of distinguished men, in all the walks of life, wrote to the society, making enquiries respecting its prospects, and rules, and expressing a desire, at some future time to join it. Mr. Owen remained at New Harmony a little more than a year; in which time he made a voyage to Europe. The fourth of July, 1826, he promulgated his famous declaration of 'mental independence.' The society had begun to moulder before this time. He has left New Harmony, and 'the social system' is abandoned. It is to be hoped that this beautiful village, which has been the theatre of such singular and opposite experiments will again flourish.

Brookville is a decaying village, in the forks of the beautiful White Water. It was noted for the number and enterprise of its mechanics and manufacturers. A number of its public and private buildings are of brick, and respectable. It has grist mills, saw mills, carding machines, a printing office, and numbers of the common mechanic shops, where the usual articles of city manufacture are made.

The surrounding country is finely timbered and watered. The soil is rich and productive; and has acquired reputation for the excellence of its tobacco. From some cause, notwithstanding all these advantages, it has declined. The number of houses exceeds one hundred.

Harrison is situated on the north shore of White Water, eight miles from its mouth, eighteen north-east of Brookville, and in the centre of an excellent body of land. The village is divided between the jurisdiction of Ohio and Indiana. In the rich and extensive bottoms that surround this village, are found great numbers of Indian mounds. They contain quantities of human bones in all stages of decay. Indian axes, vases, and implements of war and domestic use, abound in them. In the bottom of most of them are found brands, coal, and ashes; indications from which antiquarians have inferred that they were places of sacrifice, and that the victims were human.

Richmond is a thriving town of one thousand five hundred inhabitants.

Indianapolis is situated on the west bank of White river, in the centre of one of the most extensive and fertile bodies of land in the western world; nearly central to the state, and at a point accessible by steam

boats, in common stages of the Wabash. No river in America, according to its size and extent, waters greater bodies of fertile land than White river. The country is settling about this town with unexampled rapidity. But a few years since, it was a solid and deep forest, where the surprised traveller now sees the buildings of a metropolis, compact streets and squares of brick buildings, respectable public buildings, manufactories, mechanic shops, printing offices, business and bustle. Such is the present aspect of Indianapolis, which contains two hundred houses, and twelve hundred inhabitants. It will probably become one of the largest towns between Cincinnati and the Mississippi.

In the recently settled parts of the state, have sprung up a number of new towns, with compact streets and handsome houses, within four or five years. The most considerable of these are Logansport, Terre Haute, Rockville, Crawfordsville, and Lafayette. This last town is now the head of navigation on the Wabash. At the point designated by the commissioners for the termination of the Wabash and Erie canal, sixty-six miles below Lafayette, is the famous battle ground of Tippicanoe, at the mouth of that river. It exhibits the most beautiful scenery. The breast-works of the American army are still visible. The hottest point of the fight is indicated by the masses of bones of the horses that were killed. General Tipton, who at the age of eighteen years distinguished himself in that battle, is the present owner of the site, and has inclosed it with a view to consecrating that event.

The increase of population in this state, since the year 1820, has been unexampled, even in the annals of western progress. The inhabitants then amounted to one hundred and forty-seven thousand. The census of 1830, gives it three hundred and forty-four thousand. This census did not include any but resident persons. Great numbers of immigrants were in the state at the time it was taken, and were not included in it. The tide of immigration was stronger at no period than last autumn. The number of inhabitants at this time exceeds four hundred thousand.

The principal influx of this population has been to the country on the upper Wabash, forming the counties of Warren, Fountain, Tippicanoe, Madison, Hancock, Clay, Carroll, Cass, Clinton, and Boone. These counties send four senators and eight representatives to the general assembly. The inhabitants are distinguished for their progress in making farms and towns, and their intelligence and respectability. Nearly half the counties have been constituted within the last five years.

The soil of the upper Wabash is of the richest quality, being black, deep, friable, and extremely productive. Over the whole extent we meet with fertile and beautifully undulating prairies. Unlike those farther west, some of them have small hills with considerable elevation, with

groves on their summits, presenting delightful prospects to the eye. The productiveness of these prairies is surprising. The face of the country is undergoing an astonishing change, which seems the work of enchantment. Three or four years ago it had only been trodden by savages or the animals of the wilderness. We now see not only luxuriant forests, numerous flocks, herds, and commencing orchards, and gardens, but neat and substantial brick houses.

In consequence of the great change produced by the opening of the New York canal, and the canal connecting lake Erie with Ontario, the north front of Indiana, along lake Michigan, which, a few years since, was regarded as a kind of terminating point of habitancy in the desert, has begun to be viewed as a maritime shore, and the most important front of the state.

Navigable Waters. Their extent has been rated at two thousand five hundred miles. We have given an estimate of twice that amount. When we take into view the whole northern lakes and all their shores, traversed at present by steam boats, this estimate will be found moderate. The boatable waters, besides the lakes, consist of the long extent of the Ohio, washing the southern shore, the Wabash and its waters, Petoka, Blue river, St. Joseph, White Water, Rocky river, Pomme, Massisincway, Eel river, Little river, Panther creek, Elkhorn, St. Joseph of lake Michigan, Great and Little Kenomic, Chemin, Chicago, Kickapoo, Theakiki, part of Fox, Plein, and Illinois. The distance from Chicago to New Orleans is 1,680 and to Buffalo 800 miles.

In regard to the facility of communication between the Ohio and Mississippi, and the lakes, we have already noted the great number of lakes and ponds, that from one extremity communicate with those rivers; and from the other, with lake Erie and Michigan. More than twenty of these portages have been practised. Among the first, we name that between St. Marys, and Little river of the Wabash. By this the French formerly communicated with their posts on the Wabash. The second is a short portage, between Chicago and the Kickapoo of the Illinois. In high spring waters, boats pass by this route from the lake to the river. The third is the distance of a league between the north branch of the Big Miami, and the south branch of the Maumee. By this communication canoes have passed from the Ohio to lake Erie. Another communication is a kind of natural canal at Laramier's Fort, connecting the Miami and the Maumee, which is practicable for boats in high waters. There is another similar connection between Hudson river of lake Erie, and Grand river of lake Michigan. The Muskingum of the Ohio communicates in spring floods with the Cuyahoga of lake Erie. There is a portage of four miles, between the St. Joseph of lake Michigan and Theakiki, of two

miles between the Theakiki and the great Kenomic, of half a mile between the Great and Little Kenomic; of three miles between Chicago and Plein, and numerous other communications between the rivers of the Wabash and lake Michigan, too numerous to mention.

The river Chicago, empties into lake Michigan, near the territorial limits of Indiana and Illinois. Its harbor is the south-western extremity of that lake. Fort Dearborn, where the bloody tragedy of September, 1815, was enacted by the Indians, in the massacre of its garrison, was, until recently, a military post of the United States. It has lately been abandoned. At the mouth of this river is the only harbor on the lake for a great distance; and whenever a canal shall unite the Illinois with the lake, it will become a place of great commercial importance.

Indians. Until recently, they owned the greater part of the fertile lands in this state. Most of these lands have lately been purchased of them by treaty. The names of the tribes, as they used to be, convey little idea of their present position and numbers. Great numbers have emigrated far to the west, on White river and Arkansas. Others have strayed into Canada, or towards the sources of the Mississippi, and their deserted places are rapidly filling with the habitations of white men. Their names, as they used to be, are Mascontins, Piankashaws, Kickapoos, Delawares, Miamies, Shawnese, Weeas, Ouitanons, Eel rivers, and Pottowattomies. Their present numbers cannot exceed four or five thousand souls. It is an unquestionable evidence of the fertility of the country in the interior of Indiana, that it was once the seat of the most dense Indian population in the western country. The Indians invariably fixed in greatest numbers, where the soil was fertile, the country healthy, and the means of transport on water courses easy and extensive. Such countries abounded in fish and game, and such was the country in question. The Indians in this country were invaded, in 1791, by General Wilkinson. He destroyed their principal town. It contained one hundred and twenty houses, eighty of which were roofed with shingles. The gardens and improvements about it were delightful. There was a tavern with cellars, bar, public and private rooms; and the whole indicated no small degree of order and civilization. The prophet's town, destroyed by General Harrison in November, 1811, was a considerable place. The Miamies possess a reservation near Logan's Fort, of thirty-six miles square of land, of the finest quality. Their numbers are one thousand one hundred and fifty. Beside their rich lands, they have an annuity of twenty-five thousand dollars, which, with their possessions, render them wealthy. Near the Kankakee Ponds, north of the Wabash, reside the Pottowattomies, who are more numerous than the Miamies. These Indians, in 1826, ceded lands to the United States, for the purpose of causing

a road to be constructed from lake Michigan by way of Indianapolis to the Ohio. Congress confirmed the grant, and the road has been laid out, and rendered passable.

Game and Fish. The interior and northern parts of this state are abundantly stocked with game. Bears, and especially deer, are common. Wild turkeys have been supposed by some to abound as much on the waters of White river, as they do in the settled regions. Hundreds are sometimes driven from one corn field. Prairie hens, partridges, and grouse, abound on the prairies, and in some seasons wild pigeons are seen here in countless numbers. Where they roost, the limbs of the trees are broken off in all directions by their numbers. Venomous snakes and noxious reptiles are sometimes seen, especially in the vicinity of lodges of rocks. The rattle snake and the copper head are the most numerous and dangerous. The streams, and especially those that communicate with lake Michigan, are abundant in fish of the best qualities. The number and excellence of the fish, and the ease with which they are taken, are circumstances of real importance and advantage to the first settlers, and help to sustain them, until they are enabled to subsist by the avails of cultivation.

Minerals and Fossils. There are salt springs in different parts of the state. We do not know, that any of them are worked to much extent. The salt has hitherto been chiefly brought from the United States' saline, back of Shawneetown, or from the salines of Kenhawa. Stone coal of the best quality is found in various places. Native copper has been discovered in small masses, in the northern part of the state. Iron ore is also found in some places. But in general it is a country too level to be a mineral one. Although from the first settlement of the country, it has been asserted that there is a silver mine near Ouitanon.

Antiquities. This state once possessed a numerous Indian population. Their mounds, sepulchres, ruined villages, the sward of blue grass, which indicates in times nearer, or remote, the position of an Indian village, their implements of war and agriculture, dug up by the spade, or turned up by the plough, strike us on all sides, as we travel through this state. They cannot but excite deep and serious thoughts in a reflecting mind. French traditions relate, that an exterminating battle took place in a spot, which is now designated by two or three small mounds, near where Fort Harrison now stands. The battle was fought between the Indians of the Mississippi, and of the Wabash. The prize of conquest was the lands which were adjacent to the field of battle. A thousand warriors fought on each side. The contest commenced with the sun, and was fought with all the barbarity and desperation of Indian bravery. The Wabash warriors were victorious with seven survivors; and the vanquished came off with only five.

Curiosities. Like Alabama and Tennessee, this state abounds with subterranean wonders, in the form of caves. Many have been explored, and some of them have been described. One of them is extensively known in the western country by the name of '*the Epsom salts cave.*'

It is not very far from Jeffersonville. When first discovered, the salts were represented as being some inches deep on the floor. The interior of this cave possesses the usual domes and chambers of extensive caverns, through which the visitant gropes a distance of a mile and a quarter to the 'pillar,' which is a splendid column, fifteen feet in diameter, and twenty-five feet high, regularly reeded from top to bottom. Near it are smaller pillars of the same appearance.

The salt in question is sometimes found in lumps varying from one to ten pounds. The floor and walls are covered with it in the form of a frost, which when removed, is speedily reproduced. The earth yields from four to twenty pounds to the bushel; and the product is said to be of the best quality. Nitre is also found in the cave in great abundance, and sulphate of lime, or plaster of paris.

Roads and Canals. We have seen that the state has laid out and rendered passable a road from lake Michigan to the Ohio. The national road is laid out, and some part of it made through the state from east to west, passing through Indianapolis. The common roads are in good passable condition during the summer. But in winter, and especially during rainy weather, they are excessively deep and heavy. Regular ferries are now established across the rivers at all the important points of travel. The project of a rail road from the Ohio to lake Michigan has been discussed. None of the western states, from the configuration, to which we have adverted, possess greater facilities of making canals; as great numbers of the small lakes communicate at present with the Ohio and Mississippi from one extremity, and with lake Michigan from the other, and require only that the communications should be deepened to become natural canals.

A canal has been projected by the state, after a long discussion of two or three legislative sessions, entitled the Wabash and Erie canal. It is intended to connect by the Big Miami and the Dayton canal, with lake Erie. Funds have been provided for making it; but, owing to some division of opinion respecting the comparative utility of canals and rail roads, the excavation has not yet been commenced.

Seminaries. Indiana College, at Bloomington, commenced in 1828. As early as 1804, the then territorial government of Indiana incorporated what was called the University of Vincennes. A brick building was erected, and the university figured for some years in the statutes of legislation. When the territory became a state, a township of land to be so-

lected by the president of the United States, was appropriated to this institution, in addition to the township already owned. The new township was selected by the president, near Bloomington. The original title of the college was changed, and the brick edifice sold. It then took the name of Indiana College. In 1829, it received an efficient organization under a learned president, with two professors and a tutor. The number of students is about sixty. The seat of the college is a delightful village, central to a healthy and fertile country. A thorough classical education is imparted at an expense as moderate as in any other similar seminary in the union.

Hanover Academy was established at Hanover, six miles below Madison on the Ohio, in 1827. It is chiefly intended as a Presbyterian theological school, and is under the care of the Presbytery of Indiana. It has an endowment in land, and the system of manual labor is contemplated. It is intended that the expenses of board and tuition shall be but thirty dollars a year. It has 22 students, 18 of whom are preparing for the ministry. Some other institutions of education exist, called academies; and high schools are in contemplation in different parts of this rapidly advancing state.

A historical society has recently been formed, the object of which is to investigate the antiquities of the country, and preserve the materials for the annals and history of the state. A respectable library has already been collected, and the society bids fair to be efficient in furnishing documents of practical utility in furthering its objects.

That spirit of regard for schools, religious societies and institutions, connected with them, which has so honorably distinguished the commencing legislation of Ohio, has displayed itself in this state. There are districts, no doubt, where people have but just made beginnings, and are more anxious about carrying on the first operations of making a new establishment, than educating their children. But it ought to be recorded to the honor of the people, that among the first public works in an incipient village, is a school house, and among the first associations, that for establishing a school. Schools are established in all the considerable towns and villages in the state. In many of the more compact there is a reading room and a social library. The spirit of enquiry, resulting from our free institutions, is pervading the country, and a thirst for all kinds of information is universal. This state will soon take a high place among her sister states, in point of population. It is hoped that her advance in intellectual improvement, and social and religious institutions will be in corresponding proportion.

Constitution and Government. This state was admitted into the union in 1816. The constitution does not differ essentially from that of the

other western states. Where it does differ, it is in having a more popular form than the rest. The governor is elected for three years; and is eligible six years out of nine. The judiciary is composed of a supreme and circuit courts.

The judges of the supreme court are appointed by the Governor, and have appellate jurisdiction. The circuit courts are to be held by one judge and two associates—the former to be appointed by the legislature, and the latter by the people; all to be held for the term of seven years. All free white males, of twenty-one years and upwards, of the United States, are admitted to the elective franchise.

History. The country on the Wabash was early visited by French traders or hunters from Canada. The settlement of Vincennes dates back as far as 1702. The first settlement was composed of soldiers of Louis XIV. They were, for more than an age, almost separated from the rest of mankind; and had, in many respects, assimilated with the savages, with whom they intermarried. In the time of the American revolution, they manifested a disposition so unequivocally favorable to it, that the general government ceded to them a tract of land about Vincennes, at the close of that war. The sparse population in this then wilderness, suffered severely from the savages, until the peace which was restored by the treaty at Greenville. The Indians still owned the greater portion of the territorial surface. In the year 1811, in consequence of their depredations and murders, a military force was sent against them; and they were defeated, and compelled to sue for peace. The bloody battle of Tippecanoe has already been mentioned. Since the peace they have been quiet, and have ceded the greater part of their lands to the United States. In 1801, Indiana was erected into a territorial government. During the late war the tide of immigration was almost completely arrested. Many of the settlements were broken up by the savages. Immediately on the termination of that war, the tide set strongly again, through Ohio, to this state; and population poured in upon the woods and prairies. It has since been filling up with almost unexampled rapidity. It suffered severely along with the other western states by the change of times, that occurred after the close of the war. The same foolish, or iniquitous system of spurious banks, or *relief laws*, was adopted here as in the state farther west; and with the same results. The bank of New Lexington was a notorious schemo of iniquity; and was one of the first bubbles that burst in this young community. Though the people did not immediately take warning, they were among the first that discarded all the ridiculous temporizing expedients of relief, and restored a sound circulation.

If we could present a scenic map of this state, exhibiting its present condition, it would present us a grand and interesting view of deep forests,

wide and flowing prairies, dotted with thousands of log cabins; and in the villages, brick houses rising beside them. We should see chasms cut out of the forests in all directions. We should note thousands of dead trees surrounding the incipient establishments. On the edges of the prairies, we should remark cabins, or houses, sending up their smokes. We should see vast droves of cattle, ruminating in the vicinity of these establishments in the shade. There would be a singular blending of nature and art; and to give interest to the scene, the bark hovel of the Indians, in many places, would remain intermixed with the habitations of the whites. But the most pleasing part of the picture would be to see independent and respectable yeomen presiding over these great changes. The young children would be seen playing about the rustic establishments, full fed and happy, sure presages of the numbers, healthfulness, and independence of the coming generation.

The revenue of the state for 1831, is one hundred and three thousand four hundred and thirty-two dollars; the expenditure is thirty-seven thousand seven hundred and sixty-five. Deduct the canal and Indianapolis fund, twenty-eight thousand one hundred and sixty-four; and there will remain a balance in the treasury in favor of the state.

OHIO.

LENGTH, 210 miles. Mean breadth, 200 miles; containing 40,000 square miles, and 25,000,000 acres. Between $38^{\circ} 30'$ and $41^{\circ} 19'$ N. latitude; and between $3^{\circ} 31'$ and $7^{\circ} 41'$ west from Washington. Bounded on the north by the territory of Michigan, and lake Erie; east by Pennsylvania; south-east by Virginia, from which it is separated by the Ohio; south by the Ohio, which separates it from Virginia and Kentucky; and west by Indiana.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Columbus.</i>
Adams,	West Union,	101 miles.
Allen,	Wassahkonnetta,	110
Ashtabula,	Jefferson,	191
Athens,	Athens,	73
Belmont,	St. Clairsville,	124
Brown,	Georgetown,	104
Butler,	Hamilton,	101
Champaign,	Urbana,	50
Clark,	Springfield,	43
Clermont,	Batavia,	109
Clinton,	Wilmington,	67
Columbiana,	New Lisbon,	152
Coshocton,	Coshocton,	84
Crawford,	Bucyrus,	69
Cuyahoga,	Cleveland,	138
Drake,	Greenville,	103
Delaware,	Delaware,	23
Fairfield,	Lancaster,	28

Fayette,	Washington, C. H.	45
Franklin	Columbus,	
Gallia,	Gallipolis,	108
Geauga,	Claridon,	157
Greene,	Xenia,	57
Guernsey,	Cambridge,	83
Hamilton,	Cincinnati,	112
Hancock,	Findlay,	114
Hardin,	Hardy,	66
Harrison,	Cadiz,	124
Henry,	Damascus,	161
Highland,	Hillsboro,	74
Hocking,	Logan,	47
Holmes,	Millersburgh,	80
Huron,	Norwalk,	113
Jackson,	Jackson, C. H.	74
Jefferson	Steubenville,	149
Knox,	Mount Vernon,	45
Lawrence,	Burlington,	135
Licking,	Newark,	34
Logan,	Bellefontaine,	62
Lorain,	Elysia,	130
Madison,	London,	27
Marion,	Marion,	47
Medina,	Medina, C. H.	111
Meigs,	Chester,	94
Mercer,	Saint Mary's,	111
Miami,	Troy,	78
Monroe,	Woodsfield,	140
Montgomery,	Dayton,	66
Morgan,	McConnelsville,	70
Muskingum,	Zanesville,	59
Paulding,		
Perry,	Somerset,	46
Pickaway,	Circleville,	26
Pike,	Piketon,	65
Portage,	Ravenna,	127
Preble,	Eaton,	92
Putnam,	Sugar Grove,	148
Richland,	Mansfield,	71
Ross,	Chillicothe,	45
Sandusky,	Lower Sandusky,	103

Scioto,	Portsmouth,	91
Seneca,	Tiffin,	85
Shelby,	Sidney,	86
Stark,	Canton,	116
Trumbull,	Warren,	157
Tuscarawas,	Now Philadelphia,	107
Union,	Marysville,	37
Van Wert,	Willshire,	146
Warren,	Lebanon,	83
Washington,	Marietta,	106
Wayne,	Wooster,	86
Williams,	Defiance,	175
Wood,	Perrysburgh,	135

The census of 1830, gives the population of this state as follows: Whites, 928,093. Other persons, 9,586. Total, 937,679.

Face of the Country. There is, probably, no where in the world a body of land of the same extent, of which a greater proportion is susceptible of cultivation. It may be considered a surface of table land, sloping in one direction towards the Ohio, and in the other towards lake Erie. The northern belt has great tracts of wet and marshy soil. They are, however, excellent, and in positions that render them easy to be drained. They are covered with forests, and when cleared and drained, will not make the least valuable parts of the state. There are extensive bodies of lands, heavily timbered, in a state of nature, which are as level as prairies. The most fertile part of the state is between the two Miamies. On the upper courses of the Miamies, Muskingum, and Scioto, are rich and extensive prairies, divided into wet and dry prairies, of which the latter only are at present susceptible of cultivation. The forest trees are the same as in Kentucky and Indiana, except that the peccan tree, which is common on the waters of the Wabash, is not often found here. The forests are deep, but in the richest soils the trees are rather distinguishable for their straightness than their size. A considerable part of the eastern and south-eastern division is hilly; in some places rising into fine cultivable swells, and in other places into hills, too broken and precipitous to admit of cultivation. The most marshy parts are found on the table lands, the highest in the state. But nine-tenths of the surface are susceptible of cultivation, and are already, or are rapidly becoming, a thickly settled country of moderate sized freeholds. One remark may convey a general idea of the forest. It is, as in Indiana and Illinois, composed almost entirely of deciduous trees, with few evergreens, or terebinthine trees, if we except some few cypress trees. On its whole wide surface, is scarcely any land so hilly, sterile, or marshy, as with moderate labor,

may not be subdued, drained, and cultivated. The whole region seems to have invited a hardy and numerous body of freeholders to select themselves moderate and nearly equal sized farms, and to intersperse them over its surface. In respect to the smallness of the farms, the number, equality, and compactness of the population, not confined, as farther west, to the water courses, but diffused over the whole state, it compares very accurately with New England.

To an eye that could contemplate the whole region from an elevated point, it would even yet exhibit a great proportion of unbroken forest, only here and there chequered with farms. Yet in the county towns, and better settled districts, any spectacle that collects the multitude, a training, an ordination, an election, or the commencement of any great public work, causes a rush from the woods and the forests, which like the tented trees of the poets in the elden time, seem to have given birth, for the occasion, to crowds of men, women, and children, pouring towards the point of attraction. There are vast tracts of country that are actually alluvial, and in fact the greater part has an alluvial aspect, as though it had not long since emerged from the waters.

It has been asserted, and commonly believed, that springs dry up, and fail, as a new country becomes settled.

Many of the oldest and most intelligent settlers resolutely deny the assertion, and affirm the direct contrary; declaring that the streams in general, are more flush in the cleared and settled country, than they were when it was an unbroken forest. In proof, they point out many streams, which then became dry in summer, and now yield sufficient water to turn mills, through the season. This is one of those disputable points which is apt to be settled differently, according to the experience and opinions of the party. It certainly involves one of the most interesting questions in relation to the influence of cultivation upon climate, a question which ought to have been more elucidated by the settling of the western country than any other; but which has hitherto been discussed in a desultory and unsatisfying manner. Forests are supposed to condense vapors, and attract clouds. Clearing them away gives more free scope to the winds, and tends to equalize atmospheric action. Cultivation renders the surface of the soil more compact, and retentive of moisture; and we incline to the opinion that the western streams are fuller and more lasting, since the cutting down of the forests, and that the Ohio and Mississippi carry more water than formerly. But the experience of almost every old settler warrants the fact, that innumerable springs have failed since the cutting down of the forests that shaded the hills, whence they sprung. This partial result may, however, be more than counterbalanced by a general change in atmospheric action, consequent upon opening vast surfaces of the forest to the influence of the sun and air.

The forest of this state is generally deep and heavy. The prevalent kinds of trees are, the different species of oak, white, red, and black, burr, and overcup; three or four species of ash, white, blue, and black; yellow and white poplar; all the different species of hickories; black and white walnut; three species of elm, hackberry, buck-eye, linn, and coffee tree. White maple is common, and sugar maple, of great beauty, almost universal. Beech, however, is the most common timber. The undergrowth is spice-bush, dogwood, iron wood, horn beam, black haw, pawpaw, different species of thorn, and wild plum.

Unimproved land rates from two to eight dollars per acre, according to situation and quality; improved land, from five to twenty dollars, according to the improvement, situation, and quality.

Agricultural Productions. Every production common to the climate is raised here in great abundance. Without having the appearance of being as rich as the lands in some parts of Illinois and Missouri, the soil in this part of the Mississippi valley is found by experiment to be remarkably productive. To be able to judge of the extent and power of vegetation, one must reside in the state through the summer, and observe with what luxuriance and rapidity the vegetable creation is pushed on; how rapidly the vines, grain, and fruits grow, and what a depth of verdure the forest assumes. Indian corn is the staple of the grains, and is nowhere raised more easily, or in greater abundance. On rich alluvial soils 110 bushels have been produced from an acre, though fifty may be considered an average crop. The state, generally, has a fine soil for wheat, Rye, barley, oats, spelts, buckwheat, and all the grains are raised in great abundance and perfection. Melons, squashes, pumpkins, the pulses, garden vegetables, both bulbous and tap-rooted, as potatoes, onions, beets, carrots, parsnips, and generally garden and culinary vegetables are raised in great perfection. The soil, being more stiff, clayey, and fitted to retain moisture, than the soils farther west, makes the best gardens. We have nowhere seen so fine asparagus in the west, as in the markets of this state. Fruits of all kinds are raised in the greatest profusion, and apples are as plenty in the cultivated parts of this state, as in any part of the Atlantic country. The markets are amply supplied with pears, peaches, plums, cherries, gooseberries, strawberries, and cultivated grapes. In a few years this state will take place of any in the Union, in the abundance and excellence of its fruits of all kinds. From the fulness and richness of the clusters of cultivated grapes, it is clear, that this ought to be a country of vineyards. The Germans have already made a few establishments of the kind, with entire success. Apricots, nectarines, and quinces, succeed; and this state is the appropriate empire of Pomona. Recently, tobacco has been added to the articles cultivated. The quality and flavor

are such as to warrant the expectation, that it will shortly be a principal article of export. Yellow tobacco, which bears a price so much higher than any other kind, has been found to prosper remarkably. Hemp is an article of cultivation in some parts of the state. Agricultural improvement, however, proceeds with slow pace. The people, generally, are not at all given to experiment; and continue to farm in the old and beaten routine. No part of the western country calls more imperiously for agricultural improvement; for this state begins to be thickly settled, and naturally to invite efforts to improve the cultivation. Intelligent and patriotic men are making great exertions to introduce the cultivation of the vine and mulberry, that wine and silk may be added to the articles of production. These states, that are so far from a foreign market, and whose bulky articles are so expensive in transportation, ought to use every exertion to introduce a cultivation, that would have more value in a smaller compass. Besides trees, shrubs, and vines, this state produces a great abundance of indigenous productions, that are useful in medicine. We may mention *actea racemosa*, squaw root, Virginia snakeroot, Indian turnip, ginseng, which is dug in considerable quantities, as an article of commerce, colombo, lobelia, valerian, blood root, or *sanguinaria canadensis*, and various other herbaceous medicinal plants.

Rivers. Under this head we shall describe the noble and beautiful river, that gives name to the state. If the Mississippi has more grandeur, the Ohio has clearly more beauty. If the Mississippi rolls along its angry and sweeping waters with more majesty, the Ohio far exceeds it in its calm unbroken course, which seldom endangers the boats on its bosom, except there be mismanagement or storms. No river in the world rolls for the same distance such an uniform, smooth, and peaceful current. Its bluffs and bottoms have a singular configuration of amenity, or grandeur. Sometimes lofty bluffs, three hundred feet in height, impend the river and cast their grand shadows into the transparent waters. On the other side are fine bottoms, generally above the overflow, and covered with beautiful forest trees, among which rises the venerable sycamore, the king of the forests, and throws its white arms over the other trees. Whoever has descended this noble river in spring, when its banks are full, and the beautiful red bud, and *cornus Florida*, deck the declivities of the bluffs, and are seen at intervals in the bottoms, or in the autumn, when the leaves are all turning yellow, will readily allow the appropriateness of the French name, 'la belle riviere.'

It is a river formed by the junction of the Alleghany and Monongahela at Pittsburgh. The highest sources of the Alleghany river, are in Potter county, Pennsylvania, twelve miles to the eastward of Coudersport, where they interlock with the head waters of the Genessee river, and the

east and west branches of the Susquehannah. From Coudersport it holds a north-westwardly course twenty miles, during which it is augmented by several streams, and then enters the state of New York. Three miles above the New York line, it receives Orway creek, a considerable stream, from the east, and five miles farther, Oil creek, from the north, and then passes the settlement of Hamilton. It thence holds a west course fifteen miles, and receives the Tunuauguanta creek from the south. Here it bends to the north seven miles, and receives Greatvalley creek from the north. It thence bends to the south-west, and after a course of twenty-five miles, passes again into the state of Pennsylvania, and winding south-west, receives the Connewongo from the north, at the town of Warren. It thence holds a west course seven miles, and receives the waters of Brokenstraw creek, from the west. It thence curves south-west thirty miles, and receives the Teonista, from the east. Twenty miles farther west, it receives Oil creek from the north, and seven miles farther, French creek from the north-west. By this stream it has a communication with lake Erie. It now assumes a south-east course, and thirty miles farther receives the waters of Toby's creek, an important stream which extends one hundred miles into the interior of Pennsylvania. Retaining the same course thirty miles, it receives Red Bank and Mahoning creeks. Passing Kittanning and Crooked creek, twenty-four miles farther, it receives the waters of the Kiskiminitas.

This river is formed by the junction of the Conemaugh and Loyalhanna rivers, which rise near the Alleghany mountains, one hundred miles distant. Below this point the Alleghany continues a south-west course about thirty-five miles, and reaches Pittsburgh, where it unites with the Monongahela. The former river, though it has not a volume apparently wider than the other, is by far the most important tributary of the Ohio. It has a swift, sweeping, and rapid current, and often a rocky bottom, whence huge rocks rise to the surface of the water. When it is full, in the spring, flat and keel boats descend it rapidly, and without danger. It has been navigated by steam boats, but is one of the most difficult currents to stem, which that kind of boats has yet attempted to vanquish.

Monongahela river, the other important branch of the Ohio, rises in Virginia, seventy miles north-west of Morgantown. Twelve miles north of Morgantown it passes into Pennsylvania, and a few miles farther receives the waters of Cheat river, from the east. Seventy miles farther it receives the waters of the Youghiogeny river, or, as it is commonly called, the Yough, the most important branch of the Monongahela, rising near the upper waters of the Potomac, separated only by a spur of the mountains. From the western declivity of these mountains, both this and the main river receive a great accession of mountain streams.

The united stream has now become broad and majestic. It flows in a north-west course to Pittsburgh, and where it unites with the Allegheny, is more than four hundred yards wide. The Ohio, at the junction, is something more than six hundred yards wide, and immediately assumes that broad, placid, and beautiful aspect, which it maintains to its junction with the Mississippi. The Monongahela traverses a rich and well settled country, noted for its whiskey, flour, iron, and manufactures. The banks are often bold and high bluffs, and in some places the country is hilly. In good stages of the water, it is boatable by large boats 100 miles from its mouth. There are few more rural, picturesque, and delightful tracts of country in the United States, than on this river.

The Ohio, from its commencement, affords most delightful prospects. Rivers of romantic and beautiful character come in, almost at equal distances, as lateral canals. Its bottoms are of extraordinary depth and fertility; generally high and dry, and for the most part healthy; while the configuration of the country on the banks has all that grandeur, softness, or variety, still changing and recurring in such combinations as are requisite to destroy a monotonous effect. For thirty miles below Pittsburgh its course is north-west. It then slowly turns to the west south-west, and pursues that general direction five hundred miles. Thence south-west one hundred and seventy miles. Thence westward two hundred and eighty miles. Thence south-west one hundred and seventy miles, through that low and swampy country, in which it finds the Mississippi. Between Pittsburgh and the mouth it is diversified with one hundred considerable islands, besides a greater number of tow-heads and sand-bars, which in low stages of the water greatly impede navigation. Some of these islands are of exquisite beauty, and afford most lovely situations for retired farms. The passages between them, and the sand-bars at their head, are among the difficulties of the navigation of this river. The order of the entrance of the creeks and rivers, as we descend, is as follows: Chartier's creek, 4 miles below Pittsburgh, from the south. Big Beaver, 30 miles, from the north. Little Beaver, 42 miles below, from the north. Mill creek, 43, from the south. Big Yellow creek, 54 miles, from the north. Crookton's run, 62, from the north. King's creek, 66, from the south. Wills' creek, 71, from the north. Harman's creek, 72, from the south. One mile below this creek is the large and flourishing town of Steubenville. Indian Cross creek, 75 miles, north. Virginia Cross creek, 76 miles, south. Indian Short creek, 87 miles. Virginia Short creek, opposite on the south. Wheeling creek, 96 miles, south. Just above this creek is the commercial and important town of Wheeling. McMahon's creek, south, 100 miles. Little Grave creek, south, 108. Big Grave creek, north. Fish creek, south, 123. Fishing creek, south,

137. Stony creek, north, 162. Little Muskingum, north, 179. Muskingum, north, 183. At the mouth of this river is the considerable town of Marietta. Little Kanawha, south, 197. Little Hockhocking, north, 204. Big Hockhocking, north, 210. Shade river, north, 221. Little Sandy, south, 227. Big Sandy, south, 231. Great Kanawha, south, 283. On this large and important stream are the most extensive salt works in the western country. Little Guyandotte, south, 307. Big Guyandotte, south, 327. Great Sandy, south, 341. Little Sandy, south, 364. Little Scioto, north, 380. Big Scioto, north, 390. This is a very important river of Ohio. On its banks are extremely rich lands. The political metropolis, Columbus, is situated on it. A little above its mouth is the considerable village of Portsmouth. The great Erie canal enters the Ohio, near the mouth of this river. The former capital of Ohio, Chillicothe, is also on its banks. Turkey creek, north, 395. Conecogue, south, 401. Stout's run, north, 418. Brush creek, south, 421. Sycamore creek, south, 424. Crooked creek, south, 444. Lime Stone creek, south, 452. Just below this creek is the large and important town of Maysville, one of the oldest and most accustomed landings on the Ohio. Eagle creek, north, 462. Straight creek, north, 468. Bracken creek, south, 472. Bull Skin creek, north, 479. Bear creek, north, 488. Big Indian creek, north, 492. Muddy creek, north, 503. Little Miami river, north, 510. Crawfish creek, north, 519. Deer creek, north, 523. Licking river, south, 524. This is an important river of Kentucky, entering the Ohio between Newport and Covington, and opposite Cincinnati. Mill creek north, 528. Great Miami, north, 551. Laughery's creek, north, 562. Gunpowder creek, south, 575. Big Bone Lick creek, south, 583. Kentucky river, south, 629. Six miles above this, on the opposite shore, is Vevay, and the beautiful Swiss vineyards. Little Kentucky river south, 628. Bear Grass creek, south, 703. Just below this creek is the important and commercial town of Louisville, and the only considerable impediment in the navigation of the Ohio from its commencement to its mouth. This impediment is a ledge of rocks, extending across the Ohio, constituting a considerable extent of rapids, called 'the falls of Ohio.' A canal round these falls, on the Kentucky side of the river, a work of immense magnitude and utility, is completed. Salt river, south, 730. Falling Spring, south, 751. Indian, or Wyandot creek, north, 775. Big Blue river, north, 792. Hardin's creek, south, 818. Anderson's river, north, 851. Blackford creek, south, 864. Green river, south, 925. This is an important river of Kentucky. Pigeon creek, north, 935. Highland creek, south, 993. Wabash, north, 1,003. This is a large, beautiful, and important river of Indiana. Saline river, north, 1,021. Not far above this creek is Shawneetown, a considerable village

of Illinois. Great quantities of salt are manufactured on this creek. Grand Pierre creek, north, 1,049. Cumberland river, south, 1,071. This is a very important river of Tennessee and Kentucky. Tennessee, south, 1,084. This is by far the largest and most important tributary of the Ohio. It waters considerable extents of Alabama, Tennessee, and Kentucky. Casb river, north, 1,120. Mouth of the Ohio, 1,132.

It should be observed that the distances, as noted by the present steam boat navigators, make the whole distance from Pittsburgh to the mouth, fall short of one thousand miles. It is true the distances have seemed much shorter since they have been measured by the rapid course of the steam boats. But we apprehend, when measured by the convex side of the bends of the river, the former measure will be found nearer the exact truth than the latter. We may add, that we have not included in the above enumeration more than half the breaks through the banks of the Ohio, by the entrance of creeks. We have mentioned, however, the greater number of those that preserve running water through the summer. Of the above, the following are important rivers, and all navigable, in moderate or high stages of water, by steam boats, for considerable distances, viz. Muskingum, Great Kanawha, Big Sandy, Scioto, Great Miami, Kentucky, Green, Wabash, Cumberland, and Tennessee. The three last are important in the order of their standing. The Ohio at Pittsburgh is six hundred yards wide. At Cincinnati, which may be considered its mean width, it is not much more. Below the Cumberland its average width is one thousand yards. Its valley is deep, and heavily timbered, and has no where the slightest indication of prairie. It varies from two to ten miles in width. It is bounded in its whole course by bluffs, sometimes towering sublimely from the shores of the river, and sometimes receding two or three miles. Beyond the immediate verge of the bottom is a singular line of hills, more or less precipitous, stretching from five to ten miles from the banks. They are known on the Ohio by the familiar appellation of the 'Ohio hills.' Different estimates have been made of the rapidity of its current. This rapidity being continually varying, it would be difficult to assign any very exact estimate. It is found, according to the different stages of the water, to vary between one and three miles. In the lowest stages of the water, in the autumn, a floating substance would probably not advance a mile an hour. It is subject to extreme elevations and depressions. The average range between high and low water, is fifty feet. Its lowest stage is in September; and its highest in March. But it is subject to sudden and very considerable rises through the year. It has been known to rise twelve feet in a night. When these sudden elevations take place, at the breaking up of the ice, a scene of desolation sometimes occurs; and boats and every

thing in its course are carried away by the accumulated power of the ice and the water. Its average descent in the mile is not far from six inches. At Cincinnati, the surface of the river at low water is supposed to be one hundred and thirty feet below the level of lake Erie, and four hundred and thirty above that of the tide water of the Atlantic. Between Pittsburgh and the mouth, it makes three and a half degrees of southing in latitude. The average time of the suspension of its navigation by ice is five weeks. One half of the remainder of the year, on an average, it is navigable by large steam boats in its whole course. The other half it can be navigated easily only by steam boats of a small draft of water. Since the Louisville and Portland canal has been completed, steam boats of small draft can descend at all times from Pittsburgh to the Mississippi. Flat and keel boats descend the river at all seasons; but in periods of low water, with frequent groundings on the sand bars, and the necessity of often unloading to get the boat off. It would be difficult to decide when the Ohio has the most beautiful appearance, in the spring, when it rolls along between full banks, or in the autumn, when between the ripples it is calm and still, with broad and clean sand bars; or in the ripples, where its transparent waters glide rapidly over the pebbly and shelly bottom, showing every thing, as through the transparency of air. The Ohio and all its tributaries cannot have less than five thousand miles of boatable waters; and taking all circumstances into consideration, few rivers in the world can vie with it either in utility or beauty.

The Great Miami is the next largest and most interesting river of this state. It rises between 40° and 41° N. latitude, and interlocks with the Massissinaway of the Wabash, and the St. Mary's and Au Glaize, branches of the Maumee and the Scioto. It flows in a strong, but generally smooth and unbroken current, and has a valley of uncommon width and fertility, though sometimes subject to inundation. From the west it receives Loramie's creek, which enters it one hundred miles above its mouth; and Still Water, fifty miles below, and White water, seven miles above its junction with the Ohio. Its principal eastern branch is Mad river, which rises in the northern part of Logan county, traversing that county and Clark, and the north-west corner of Green county. Its general direction is south-west; and the country through which it runs is singularly fertile and beautiful. The length of its course is something more than fifty miles. It enters the Miami just above the town of Dayton, and receives its name from its furious and broken current. The chief branches of Mad river are East Fork and King's creek.

Little Miami rises in the south-west corner of Madison county, and in a south-west direction traverses Clark, Green, Warren, and Hamilton counties, and joins the Ohio seven miles above Cincinnati. It is not of

much importance as a navigable stream; but from the fertility of the lands on its borders, and its numerous mill seats, it is a river of great utility. There are nearly fifty mills on it; some of them paper mills, and other mills of importance. Its principal branches are East branch, Shawnee, Obannon, Turtle, Todd's Fork, Caesar's and Massie's creeks on the eastern side; and Goose and Beaver creek on the west. An hundred miles from its mouth, it has singular rapids, where the river in no great distance falls two hundred feet. The stream is here compressed to ten yards in width. The country between the Great and Little Miami is generally finely watered, healthy, pleasant and fertile; and may be considered the garden of the state. Its commercial intercourse is with Cincinnati.

In advancing towards the east from the Little Miami, we cross Big Indian creek, White Oak, Straight, Eagle, Bull Skin, Brush, and Turkey creeks. The Scioto is a considerable river of the Ohio, and has its whole course in this state. It rises in a morass north of Logan county. Its general direction is south-east, and its whole course little short of two hundred miles. It enters the Ohio by a mouth 150 yards wide, and is navigable, in good stages of the water, 130 miles. Its principal branches are Whetstone, Big Walnut, Lower Walnut, and Salt creeks, from the east, and Paint, Deer, Darby, Mill, and Baker's creeks, from the west. Not far above Columbus, on the banks, is an inexhaustible quarry of free stone, or marble, of a beautiful grayish color. There are rich and beautiful prairies on this river; and its valley is uncommonly wide and fertile. When it was first settled it proved to be extremely sickly. In the progress of cultivation that character has passed away; and the Scioto country is now among the most fertile, eligible, and pleasant parts of the state. Columbus, the political capital of the state, and Chillicothe, which was until recently so, are on this river; and there are many pleasant villages, and much well settled country on it and its waters.

The country between the Scioto and the Muskingum is watered by the Great Hockhocking and its waters. It enters the Ohio 150 miles above the mouth of Scioto, and is navigable for boats to Athens, forty miles from its mouth. It has a deep and still, but narrow channel. Near its source, seven miles north of Lancaster, is a romantic cascade of 40 feet perpendicular. It has a number of mills erected on it. Its chief tributaries are Rush, Sunday, Monday, Margaret's, and Federal creeks.

The Muskingum rises near the sources of the Cuyahoga of lake Erie, in the southern part of Connecticut Reserve. Its course is remarkably sinuous; but its general direction is southwardly. It traverses Stark, Tuscarawas, Coshocton, Muskingum, Morgan, and Washington counties, and enters the Ohio at Marietta, by a mouth 250 yards wide. It is boat-

ble, in good stages of water, to Coshocton, 100 miles by the course of the river. Small crafts ascend it to a portage of one mile to the boatable waters of Cuyahoga of lake Erie. There are considerable falls in the river at Zanesville, which afford sites for many mill seats. Some parts of the course of the Muskingum are through a hilly country. The principal branches are Licking, White Woman's, Willis', Wolf, Coal, Olive, Green, Moigs, Salt, Jonathan, Wakatomka, Still Water, Sugar, Coneter, Nimishillen, and Indian creeks. Above Coshocton, the river itself is generally called Tuscarawas. In the intervals of the precipitous country along this river, the lands are fine; and the country is remarkable for health.

Several considerable creeks enter the Ohio, between the Muskingum and the Pennsylvania line, such as Pawpaw, Little Muskingum, Indian, Wheeling, Captina, Stony, and Sunfish. These are the principal rivers that enter the Ohio and its waters. But the table lands of this state have a general inclination either to the Ohio, or to lake Erie; and a number of considerable rivers run from the northern belt of this table land into lake Erie. The principal of these is the Maumee.

The Maumee rises in the north-eastern angle of the state of Indiana, and flows in a north-eastern direction across the north-western borders of the state of Ohio into the western extremity of lake Erie. It is navigable thirty-three miles from its mouth. The navigation is there obstructed by shoals and rapids. It is a broad, deep stream, with an average width from one hundred and fifty to two hundred yards, and is formed by the confluence of the St. Joseph's, St. Mary's, and the Great and Little Au Glaize. This important river has a course of one hundred miles. Fort Meigs, a fortification of much note in the late war, is on this river. It has a valuable fishery, and its banks, in the season of vegetation, are remarkable for the luxuriance of their verdure. The St. Joseph's of this river heads in Indiana, is a considerable stream, and boatable fifty miles. The St. Mary's, another of its branches, has a long course of boatable navigation. The Au Glaize is a considerable stream, that passes through the Indian country, and falls into the Maumee at Fort Winchester, fifty miles below Fort Wayne. Toussaint river enters the lake twenty miles east of the Maumee. It may rather be considered an arm of the lake than a river. It rises in the prairie, has no perceptible current, and is choked with wild rice, aquatic plants, and grass. In summer it abounds with wild fowls. Otters and muskrats are trapped in great numbers by the Indians on it. Portage is an inconsiderable river heading not far from Urbana. Like most of the rivers that rise in these level lands and fall into the lake, it has very little current, and is one hundred and fifty yards wide at its mouth.

The Sandusky rises in the western limits of Richland county, and runs in a general north-west direction, ninety miles to the lake. It is more rapid than the other lake streams; but yet affords good navigation. Its chief branches are Tyemochtee, Honey, and Wolf creeks. Between this river and the Scioto, is a portage of only four miles. It has been proposed to canal this portage. There are fine bodies of land on the banks of this stream. Huron falls into the lake by a mouth fifty yards wide. Its comparative course is thirty miles. Rocky river is a stream of considerable importance. The lands on its banks are fine, and it has a rich and thriving settlement.

Cuyahoga rises in the central parts of Geauga county, and passes through Portage and Cuyahoga counties, entering the lake at Cleveland. Its whole course is sixty miles, greater part of which distance it is boatable. Above where it is boatable it has valuable mill seats. Cleveland, which has become a place of importance, is at its mouth.

Chagrin, Grand, Ashtabula, and Coneaught are considerable streams, that rise near the lake, run northwardly, and fall into it. Ohio is the country of hills and vales, delightfully irrigated with springs, brooks, and rivers of every class and size. There are more than an hundred streams, not here enumerated, which, for seven months in the year carry a considerable mass of waters. A remark, applicable to the whole western country, applies to this state, that a great number of considerable streams during the winter months, disappear before the evaporating ardors of the summer's sun.

Minerals, and Mineral Springs. In the eastern and north-eastern divisions of this state, on the Muskingum, Hockhocking, and Scioto, mineral coal abounds, and it has an extensive and rich coal region. It is in the greatest abundance, and of the best quality. It so happens, that in the same region are found the greatest bodies of iron ore. Nature seems to have furnished the industrious people of this state with every possible facility for important and staple manufactures. Lime stone, marble, and free stone, in strata easy to quarry, near the surface, and admirably adapted to building and public works, abound. The useful earths and fossils are in abundance. Specimens of gypsum are procured from Sandusky bay. Salt springs are common. In some the water contains almost as much salt as that of the sea. The most important manufactures of this article are in Muskingum, Morgan, Jackson, and Gallia counties. Nearly half a million bushels are manufactured in the state. Those springs whose waters are drunk as medicinal, are most of them more or less impregnated with muriate of soda.

The Yellow Springs, the most accustomed watering place after Harrodsburgh Springs, in the western country, are situated near the falls of

the Miami, sixty-three miles from Cincinnati, and eighteen from Dayton, intermediate between the pretty towns of Xenia and Springfield, and on the height of the table land of the state. The elevated position, the grand and romantic scenery, and the cool and salubrious air probably contribute as much to the restoration of invalids as the waters, which are, however, strongly charged with iron in solution. The hotel displays a front with a colonnade of two hundred feet, with a number of beautiful cottages parallel with the main building. The clearing is cut out of the solid mass of forest, leaving trees and openings, as beauty of scenery and shade require. From this elevation; and these sumptuous erections of art, the eye sweeps over the ancient forests towards Indiana, the Ohio and the lakes, arrested only by the horizon. The falls of the Little Miami, Pompey's Pillar, the Blue Hole, and many other romantic spectacles in this region of grand and mountain scenery, impart to this watering place all the charms that the lover of nature would require, and heighten the contrast of the luxury of the accommodations provided for visitants. Lovers of the picturesque, affirm, that neither the Bedford Springs of Pennsylvania, nor the watering places of the mountains of Virginia, surpass this place in grandeur, or equal it in amenity of prospect.

Climate. Climate here remarkably corresponds to latitude. Other elements that operate upon the result are elevation and proximity to waters, or distance from them. The climate, for instance, along the immediate valley of the Ohio is more equable and temperate than in the middle and table lands of the state; and the difference greater, than can be attributed merely to difference of latitude. The central parts of the state are in the same latitude with Philadelphia. The mean temperature of the year at Philadelphia was found to be 53° . In the same year the mean temperature of Ohio was 55° . As we recede from the Ohio the temperature diminishes in a greater ratio than that of the latitude. The prevalent and warm winds are those that blow from the gulf, and up the valley of the Mississippi. The cold breezes come charged with the cold of Canada and the lakes. In that part of the state that slopes to the south, the snow neither falls deep nor lies long. But in Connecticut Reserve, and in the points that slope towards the lakes, they have deep and durable snows; and sleighing and sledding are practicable a considerable length of time. It is a great inconvenience in this climate, that during the winter months the transitions from warm to cold, and the reverse, are frequent and violent. Thaws and frosts are the result, and the soil, being deep and clayey, the travelling is muddy and uncomfortable. The winters are sometimes considerably severe, and the Ohio has been crossed at Cincinnati for nine weeks. Oftentimes they are mild, and can scarcely be said to be more than a prolongation of autumn and spring. Winter

seldom commences in severity until Christmas, and its severity is generally mitigated early in February. Vegetation, which is the most certain and accurate thermometer, indicates a temperature of greater mildness in the season, than in the corresponding latitudes in the Atlantic. The heat of the summer in the Ohio valley is uniformly oppressive, but does not commence early, nor continue late in the season. The heat of summer abates as early in the autumn as in the more northern latitudes in the Atlantic country. The autumns are almost uniformly temperate, dry, and beautiful; and nothing can exceed them for health and pleasantness. No where in the world is the grand autumnal painting of the forests in the decay of vegetation, seen in more beauty than in the beech forests of Ohio. The richness of the fading colors, and the effect of the mingling hues, baffles all description. A great farming community like that of Ohio, could scarcely desire a better climate for themselves, their cattle, and stock of all kinds; or one, in which a man can work abroad with comfort a greater number of days in the year.

Antiquities. We have space to add but little upon this subject. The most remarkable are at Worthington, Granville, Athens, Marietta, Gallipolis, Paint creek, Circleville, and on the Little Miami. The domestic utensils, pottery, vases, and trinkets of the inhabitants, who, probably, reared them, are found in and about the mounds. The instruments of their warfare are discovered, too, and give clear indications that they cultivated the horrid art of shedding human blood. Most of the human bones, which are dug in great quantities from the mounds, moulder on exposure to the air. The skulls in most instances remain, and great numbers are shown in the museums. They evidence a surprising variety in the retreat of the facial angle of the skulls. It is affirmed, that marks of iron tools are found upon the wood dug up from considerable depths, below the surface of the prairies. A sword is preserved as a curiosity, which is said to have been enclosed in the wood of the roots of a tree which could not have been less than 500 years old. We have not seen this sword; but we have seen a diminutive iron horse shoe, dug up at a depth of 25 feet below the surface, in graduating the street near the mansion of Judge Burnet, in Cincinnati. It was smaller than the kind of shoe required for the smallest kind of asses. A number of the nails were in it, and the erosion by rust was such as might be expected to result from the oxidation of 500 years. Many of the mounds are composed of different earths from that which is found in their vicinity. It is the most inexplicable of all the mysterious circumstances connected with these mounds, that the material of these immense structures, some of which would require the labor of a thousand men for some time in the erection, should have been brought from a distance. There is no conceivable motive why the

earth on which the mounds rest, should not have subserved all purposes that we can imagine the builders to have had in view. We know with what scrupulous care the Jews throw a little of the earth of the holy land into the graves of their friends. Possibly this transfer of earth for the mounds, from a distance, may have reference to affecting remembrances, like those of the Jews. We have elsewhere described the most remarkable mounds at Circleville. Engravings of its form may be seen in books, that treat professedly upon this subject.

Population. A preceding table shows the population, by the census of 1830, to be 937,879. By the census of 1820, there were 130,460 men over eighteen years, capable of bearing arms. At the same time 110,991 were engaged in agriculture; 18,956 in manufactures, and 1,459 in commerce or merchandise. There were 3,495 foreigners, not naturalized. No colony in history has ever shown a greater natural increase in population. No country can show a greater number of young children, in proportion to the whole number of the inhabitants. Among the obvious causes of this great increase may be mentioned the circumstance of there being no slavery allowed in Ohio. The climate is, unquestionably, healthy. The state is divided into moderately sized freeholds. Most of the people are engaged in the healthy and vigorous pursuits of agriculture. The soil yields, in the greatest profusion, all that is necessary for healthy and comfortable subsistence. Whatever be the cause, the multitudes of children that are seen about the farm houses in the country, and that fill the streets of the villages and towns, do not fail to excite the remark of every passing traveller.

Religion. In our table of religious denominations, (see appendix,) we have given general views of the comparative numbers of the different religious denominations. There are numbers of all the known existing sects. But the Presbyterians and Methodists are the prevalent denominations. The Shakers and Tunkers have establishments in this state. German Lutherans exist in considerable numbers. Most people are desirous of being thought to belong to some religious denomination. It is affirmed by a gentleman, well known for his researches into the antiquities of this state, that there is a greater number of professors of religion, in proportion to the whole number of the people, than in any state in the union. There are a vast number of religious societies; but there is not a great number that have regularly established pastors. The custom of itinerating preaching, as a supply, is very prevalent. The people are generally a quiet, orderly, peaceable, moral, and industrious race. Suicide, excesses, murders in affray, and instances of deliberate and atrocious cruelty, are rare; and the general moral character of the people is highly respectable.

In a country so fresh, much taste for embellishment or improvement in the fine arts, cannot be reasonably expected. From New England and New Jersey this state inherits a passion for sacred music; and societies for the promotion of this delightful science are common. A vast number of New England music masters find annual employment in their vocation. There appears, also, to be a general taste for instrumental music, as is manifested in seeing in great numbers of the farm houses and cabins, rude harps and other home manufactured instruments of music. In passing the detached dwellings of the Ohio farmers in the winter evenings, we generally hear the interior cheered with some kind of music. A taste for ornament, and those arts which embellish society and existence, is evidently increasing. On anniversaries the people are addicted to show, parade, and splendor. There is a fondness for a large and stately house. Gardening is studied in many places; and Cincinnati shows a number of gardens that will vie with almost any in the United States. An idea of the means of diffusing information may be gathered from the fact, that more than eighty newspapers are printed in the state, and that it has five hundred and four post offices.

Trade and Manufactures. This state, more populous than any other in the west, and possessing in many respects manufacturing capabilities, has taken precedence of all the rest in manufactures. Cotton yarn, cloth, and woollen goods, are already manufactured to a considerable extent. Cincinnati contains a great mass of intelligent and enterprising manufacturers. Steubenville, Zanesville, Chillicothe, Dayton, and many other of the young and rising towns, are commencing manufactures with great spirit. In 1810, the manufactures of the state amounted to nearly two millions of dollars. At present they must amount to triple that sum. From a single township, 175 tons of cheese, worth 20,000 dollars, was exported in one year. The whole amount of taxable property is rated at sixty-two million dollars.

Colleges and Seminaries. In a laudable zeal to advance science and education, it is a question, if this and the other western states have not been too fond of multiplying colleges, or small institutions so called, built upon principles naturally tending to rouse a spirit of unworthy emulation, to the neglect of respectable common schools, efficient high schools, and one or two universities with endowments; library, apparatus, and professorships, to furnish the means of a finished classical education, yet a desideratum in the western country. While the most enlightened nations in Europe are content with three or four universities, we have at least fifty colleges in the western country

Ohio, preceding all her sister states in the manifestation of an enlightened zeal to advance education, has not been behind them in chartering colleges.

Miami University is situated in Oxford, near the western extremity of Ohio, and forty miles north-west from Cincinnati. It has an academical department, and a preparatory school. It has one spacious building, and others appropriated to boarders, a competent number of professors, and about eighty students in all the departments. The position is healthy, and tuition cheap. It has consequently become a considerable resort of students from other states. The annual income of its funds is about two thousand five hundred dollars.

Ohio University, at Athens, has respectable endowments and buildings, and ordinarily a number of students, not much inferior to that of the Miami institution. Its endowments consist of two townships of land.

Kenyon College, at Gambier, an episcopal institution, has arisen in the midst of what was recently a forest, in the central parts of the state. It has one magnificent building, and others of less magnitude, with ample funds and endowments, amounting to fifty thousand dollars, and one hundred and forty students.

The Western Reserve College, at Hudson, has been recently established in the north-eastern division of the state. Connected with it is an academy, in which are thirty students. The manual labor plan is in experiment here.

Franklin College, at New Athens, is in successful operation. A commodious building, sufficient to accommodate one hundred and forty students, has just been completed.

The Worthington Reformed Medical College, at Worthington, has a considerable number of medical students.

Two rival medical colleges at Cincinnati have recently been merged in one, which has one spacious building, and another of equal beauty and extent erecting. In buildings, library, apparatus, and professorships, it is highly respectable, and has had, on an average, one hundred medical students.

The Lane Theological Seminary has recently been organized, two miles distant from Cincinnati. It is under the care of the Presbyterian church, and has been endowed with funds estimated at thirty thousand dollars. The position is healthy and delightful, and the number of the students increasing.

There are fifteen or twenty academics, and as each session of the legislature incorporates new ones, we cannot be precise in imparting information upon this subject. An academical institute of some celebrity exists at Marietta. An academy, not long since incorporated at Urbana,

has a large number of pupils. There are academies at Barton, New Lisbon, Steubenville, Cadiz, Union, Gallipolis, Chillicothe, and Dayton. A very respectable High School has recently been organized at Cincinnati.

The first introduction of the New England system of common schools in the western country, was in Ohio, and dates in 1825. By different amendatory enactments it has acquired a degree of form and consistency, and the thoughts and usages of the people are growing to a gradual adaptation to it. The example, it is hoped, will be followed by the other western states, and the foundation laid for unspeakable blessings to the generations to come. By this act the trustees of every incorporated township are required to divide it into a suitable number of school districts, the prudential concerns of which are to be managed by three school directors, a clerk, and treasurer. The funds for this system arise from various sources besides the easy tax of one mill upon a dollar, constituting a large and growing revenue. It was at first found discordant with the habits and likings of portions of the population. This odium of prejudice is wearing away, and the system is going into efficient and noiseless operation. In Cincinnati alone, it has provided instruction for three thousand children, in well organized schools, many of whom, but for this provision, would probably have grown into life without a common school education. A general interest in literature is making visible progress in this great state.

An asylum for the deaf and dumb has been established at Columbus, which promises much to that suffering class of the population.

Chief Towns. This state possesses over one hundred considerable villages. Of many we have space but for little more than the names.

Cincinnati, the chief town of this state, and next to New Orleans, of the western country, is situated on the north shore of the Ohio, nearly in the south-west angle of the state. Its position is a beautiful vale twelve miles in circumference, created by an elliptical sweep of Ohio hills. Those of them that have not been laid bare by the unsparing axe, are beautifully wooded to their summits; and by the swell and indentation of their waving outline present the most graceful and charming forms. From the summit of any of these hills, the town spreads a panoramic map of exquisite painting. The eye traces every street, with its smokes, fixtures, and moving life, from which all the roughness of inception, softened by distance, disappears. The noble establishments, the handsome mansions, the extending masses of buildings, the numerous manufactures propelling their columns of black smoke aloft, the boat yards, the bustling inhabitants, with the hundred teams and drays, the Ohio winding along the southern limit, and itself enlivened by passing crafts, and stately

steam boats, rounding to the shore or departing from it, the villages of Newport and Covington, with their showy houses and manufactures on the Kentucky bank of the Ohio, taken together, offer such a picture of beauty, wealth, progress and fresh advance, as few landscapes in any country can surpass. Its first settlement was in 1789, but it was not until 1808, that a considerable part of the present town plot that surrounded Fort Washington, and belonged to the government, was sold in lots.

A more eligible position for a town can scarcely be imagined. The chief area consists of two parallel plains, the one elevated sixty feet above the other, and descending to it by a gentle and graduated slope, affording admirable facilities for washing the town by every considerable rain, and sloping it to the eye in the graceful form of an amphitheatre, and at the same time furnishing it with every pleasing variety of site for building. One of the chief beauties of this city is obvious to every eye, which, however, we have not seen recorded. The streets crossing each other at right angles, and being straight and uninterrupted, present vistas bounded by the wooded acclivities of the surrounding hills. By a well known optical illusion, these swelling hill sides, seen through a vista, narrowing in apparent width in proportion to its distance from the eye, fill the angle of vision, and preclude the perception of any distance between the termination of the street and the commencement of the hills. In consequence, through whatever street the beholder looks, it seems to be closed by a gate of verdure, and to terminate in a forest.

Seven of the streets are 66 feet wide, and 396 apart, intersected by streets of the same width and distance, at right angles. One entire square and the fraction of another, are reserved in central parts of the city for public buildings. The city buildings cover an irregular area, nearest the form of a parallelogram. The central parts are compactly built with houses and stores that would ornament any town. The most showy quarters are Main, Broadway, and Fourth street, westward from its intersection with Main. Pearl street, leading from the lower Market to Walnut street, is composed of uniform buildings, terminated by a magnificent hotel, five stories high, and adds greatly to the beauty of that part of the city. The public buildings are a court house, jail, four market houses, one of them five hundred feet in length, the Bazaar, United States branch bank, the Cincinnati College, the Catholic Athenæum, the Medical College, the Mechanics' Institute, two theatres, two museums, the Hospital and Lunatic Asylum, and the Woodward High School. Some other public buildings are in contemplation.

Besides these there are twenty-four churches, great and small. Of these the Second Presbyterian church is the handsomest, the exterior

being of agreeable architecture, and the interior decidedly beautiful. The Unitarian church is a singularly neat one. The interior of the Catholic church is striking. The new Methodist church, and the First and Third Presbyterian churches are spacious buildings. A very neat Baptist church is nearly completed. Some of the other churches make a respectable appearance.

There are many fine blocks of stores on Front and Main streets, and the eye is arrested by many beautiful private habitations. Architectural taste is daily becoming more enlightened and agreeable. The dull red of the brick walls is giving way to more pleasing shades between white and green; and a beautiful stucco, imitating marble and granite, is getting into fashion. The number of substantial buildings added annually to the city, for three years past, averages 450.

It has already become a great manufacturing town, and is constantly becoming more so. Our limits preclude details; but all the substantial manufactures known in our country, are carried on to a greater or less extent. The manufactures in iron are very great, particularly in the article of heavy castings, and all sorts of machinery driven by steam. Of such establishments there are nine or ten, and some of them on a great scale. The next most extensive article is cabinet work. Steam boat building is a great item. Hatting is pursued to a great extent. It is believed that the city contains at least forty different manufacturing establishments driven by steam power. Being the importing and exporting depot for more than a million inhabitants, this city transacts an immense business, particularly in the retailing and manufacturing line. The imports, in which dry goods are the principal item, exceed five million dollars. The amount of exports, consisting of the various articles of produce, of which pork is the chief, and of manufactures, of which iron articles and cabinet furniture are the chief, probably exceeds the imports. No town of its size in the United States, produces a more respectable show of all the different classes of mechanics, arranged under their respective standards, on the fourth of July. One hundred and eleven steam boats have been built here, at the rate of about fifteen a year for the last three years. The city revenue of 1831 was 35,231 dollars, and the expenditures 33,858 dollars.

There are two banks, a branch of the United States Bank, capital, 1,200,000, and the Commercial Bank, capital 500,000. Beside these there is a Savings bank. There are three insurance companies belonging to the city, and two branches of insurance companies at Hartford, Connecticut. The Water Company supplies the city with water from the Ohio, raised by steam power to reservoirs one hundred and fifty-eight feet above low water mark, on the side of one of the Ohio hills; whence

it is distributed over the town, at an average expense of eight dollars a year for a common family's supply. The city furnishes three daily gazettes, two semi-weekly, six weekly, of which four are religious, two semi-monthly, one monthly magazine, and one monthly agricultural paper, and one quarterly journal of medicine, making in all 16 periodicals. Thirty-two mails arrive in a week, and the post office annual receipts amount to sixteen thousand two hundred and fifty dollars.

There are eight fire companies, and thirty-four charitable societies, the means, intelligence, and charity of which, if merged in one society, would probably achieve more good than the thirty-four. There are twenty-five religious societies, in which most of the religious opinions of Christendom are represented, and whose mutual watchfulness of each other educes concord from jealousy, by hindering the hurtful predominance of any one of them, and enabling each to pursue its respective interests unimpeded and in peace.

The population in 1826, was sixteen thousand two hundred and thirty; in 1829, twenty-four thousand four hundred and eight; in 1830, twenty-six thousand five hundred and fifteen; and by a very accurate enumeration in 1831, twenty-eight thousand and fourteen, with a floating population not included of one thousand five hundred, making the total at this time more than thirty thousand.

Though the imperfect filling out of the magnificent plan of the city, the cumbering of the streets with timber, stone, bricks, and mortar, and the inconvenience of actual building present an image of crudeness and immaturity, it needs little spirit of prophecy to predict from the past to the future, that this city, which will be shortly central to more than two millions of inhabitants, which presents the greatest variety of models in the theories and imaginings of strangers from all parts of the world, which evolves the germs of emulation and rivalry to a fault, and which abounds in provisions, natural wealth, fuel, and all the materials of building, and which is moreover a healthy town, will, in the course of a few years, vie in beauty and population with the first towns in the Union.

Cincinnati has been called, somewhat to the discomposure of the sisterly feelings of Pittsburgh and Louisville, the 'Queen of the West.' Most young immigrants, who possess, or imagine that they possess a latent copiousness of speech, on first joining themselves to the citizens, woo their queen by an incense of puffing, vaunting her charms, beauty, and bounty, in solid columns. She, like other queens and beauties, regards them by turning an ear, long since sated and deaf with flattery. We know not, but she may be equally callous to the short chapter of her faults—for faults she has. In this town, as in New Orleans, there are but two chief avenues to distinction; the one wealth; the other the talent.

of gaining popular favor. The charities, which are only nursed where the people are of one race, have been born, baptized, reared, intermarried, and had their whole lot of human vicissitudes cast together, cannot be supposed to put forth such abundant fruit, where society is continually shifting by the unremitting accessions of strangers; where the morbid appetite of novelty fosters fickleness, and precludes the chance of matured friendship, mellowed by thorough acquaintance and ancient ties. Deep and enduring remembrance of the passing guest is dispelled by the heartless and hackneyed welcome prepared for the coming one.

Concurrence in broad views for the advancement of literature or the great interests of humanity, cannot be expected in a city composed of a population collected from so many different countries, and transplanting with them a mass of inveterate prejudices. In order to lay foundations of noble institutions for the present generation and the generations to come, to which the moral omnipotence of union and hearty concurrence are necessary, she would have to achieve the impossible success of uniting a score of religious sects, as many political ones, and the antipathies of national and sectional jealousies. Hence, while the existing generation talks and writes much about improvements in science and literature, it must be a more fortunate generation, in which wealth and the humbler arts of popularity are less estimated, and talents and merit more, which can expect to reap the fruits of high mental cultivation, or cultivate literature to any considerable extent.

Of competition in all the walks, this town has as much as any other, and of emulation and rivalry, an ample share. But these drawbacks—the almost inevitable results of its circumstances, notwithstanding,—no town in the United States, is advancing in beauty and population with so much rapidity, or promises such a sustained progress for twenty years to come.

The city contains a great number of excellent schools, in which the standing and improvement of the pupils will compare under the same circumstances with any other town in the Union. Besides private schools too numerous to be named, there are twenty-seven teachers of the public free schools, in which two thousand seven hundred children receive instruction. There is as great a number of clergymen, physicians, and lawyers, in proportion to the population, as in any other town.

Cincinnati has generally been considered distinguished among western towns for its salubrity. Never, until the autumn of 1832, had it suffered from any sweeping epidemic, except the influenza. At this period it was destined to a severe visitation of the prevalent spasmodic cholera. This disease, commencing early in the preceding summer in Montreal, and soon after reaching the city of New York, had been gradually extending its ravages south and west. A few cases had existed, from an

early period of its prevalence on the Ohio shore of lake Erie. But the autumn was so far advanced, before it reached Cincinnati, and the city police had taken such pains to have the city clean, that the citizens began to indulge the joyous anticipation that it would remain unvisited by the pestilence, at least for this season. Meanwhile, cases occurred on the Ohio and Erie canal, and on the Mississippi at Jefferson barracks, which had direct communications with Louisville. Early in October, the disease, arriving with passengers in boats, both from above and below, fell on the devoted city like a thunderbolt. The physicians were agitating the question whether it existed or not, in the city, when its mortal ravages were proclaimed in every quarter. It continued to rage with great malignity and mortality for three weeks. The greatest number of reported deaths in a day, was from forty-two to fifty; though it was generally believed, that the reports did not by any means embrace the whole number of deaths. The interments, during these three weeks, were differently estimated. The highest calculation gave from seven to eight hundred deaths, as the result of the pestilence, during its whole prevalence. Though its ravages, as elsewhere, fell mostly on the poor, and people of reckless habits, yet was it remarkably unsparing, sweeping off clergymen, physicians, and men of characters the most confirmed for sobriety. Great efforts, both public and private, were made for the relief of the poor, by providing hospitals, nurses, physicians, medicines, and every thing that could alleviate or console. But the spectacle in this place, which had won such a reputation for health, was most appalling during this period of gloom and mortality. Hearses by night and by day were continually followed by their processions. The whole conversation, concern, and business of the period, fell on the sick, the dying, and the dead. The disease subsided, and passed away almost as suddenly as it assailed the city. Never had it manifested its inscrutable character more distinctly than here. Towns having a much lower estimate, in point of salubrity, as for example, Louisville, were passed over with comparative impunity; and although the scourge was felt by all the considerable towns and villages on the Ohio, Mississippi, and their waters, its ravages were no where so severe in the west, the devoted city of New Orleans only excepted, as in Cincinnati.

Cincinnati is in latitude $39^{\circ} 6' 30''$ N., and in longitude $70^{\circ} 24' 45''$ W. from Washington; by the course of the river four hundred and fifty-five miles from Pittsburgh; four hundred and five from the Mississippi; one hundred and twelve from Columbus; two hundred from Sandusky; one hundred and twenty from Indianapolis; eighty-five from Frankfort; six hundred and eighty from Natchez; two hundred and seventy from Nashville; eight hundred and sixty from New Orleans; three hundred and fifty

from St. Louis; one hundred and five from Louisville, five hundred and eighteen from Baltimore, and eight hundred and fifty from New York, by the way of the Erie and New York canal.

Columbus is the political metropolis of the state, and very nearly the geographical centre of it. It is situated on the east bank of the Scioto river, in the centre of Franklin county, and occupies a beautiful slope, just below the confluence of Whetstone river with the Scioto. It was a compact forest in 1812. It now has a number of respectable schools, a classical seminary, the customary number of stores, a bank, four printing offices, a commodious brick market house, a state house, a building for the public offices, a penitentiary, and an asylum for the deaf and dumb. The state house is seventy-five by fifty feet. The top of the cupola is one hundred and six feet high. Around it are railed walks, from which the whole town is visible as from a map. It commands a delightful landscape over a country charmingly variegated, as extensive as the eye can reach. The village of Franklinton, a mile to the west, and the winding Scioto, are comprehended in this view. The building that contains the public offices, is one hundred by twenty-five feet. In a line with it and the state house, is the handsome court house for the Federal Court. These buildings are all on the public square, an area of ten acres, reserved for public use; in the centre of the town. The penitentiary is in the south-west angle of the town, and enclosed with a high stone wall. Immediately below the penitentiary is a lateral canal, on which canal boats have already floated to the town, connecting this town with the Ohio and Erie canal eleven miles south. This will greatly add to the resources of the town. There are three churches, of which the Presbyterian church is spacious, being fifty by fifty feet. The professional men are ten lawyers, five regular physicians, and five of the growing denomination called steam doctors. The number of houses is three hundred and thirty, and of inhabitants two thousand four hundred and thirty-seven. Manufactures have commenced, and its relations to the canal will give a new impetus to their growth. The circumstance of its being the political metropolis of its great state attaches to it a distinguished and polite society. It is a striking example of the creation, no longer uncommon in the western country, of a town that has grown to importance in a few years, from the solid forest.

It is in N. latitude 39° 57' and 6° W. longitude. Columbus is three hundred and ninety-six miles from Washington; five hundred and fifty-one from New York; four hundred and seventy-seven from Philadelphia; seven hundred and fifty-five from Boston; four hundred and twenty-nine from Baltimore; nine hundred and ninety-one from New Orleans; and three hundred and ninety-seven from Nashville. Columbus is one hundred and twelve miles from Cincinnati.

Steenbenville, the seat of justice for Jefferson county, is situated on the west bank of the Ohio. It was laid out with great regularity in 1798, and is in the centre of a rich and populous country. The town was incorporated in 1805, with city privileges. It contains three churches, an academy, a handsome market house, a woollen factory, a steam paper mill, a flour mill, and cotton factory. A manufacturing spirit is increasing, and new establishments are in progress and in contemplation. It has two printing offices, two banks, twenty-seven mercantile stores, sixteen public inns, an air foundery, and other mechanical establishments. In 1820, it contained 2,479 inhabitants, and now contains nearly 3,000. It is distant thirty-eight miles south-west from Pittsburgh; twenty-five north-east from St. Clairsville; and one hundred and fifty north-east from Columbus; N. latitude $40^{\circ} 25'$, W. longitude $3^{\circ} 40'$.

Zanesville, the seat of justice for Muskingum county, is situated on the east bank of Muskingum river, just below the falls. On these falls, are a number of manufacturing mills, driven by water power, among which are several flouring and saw mills, an oil mill, a rolling mill, a nail machine, two glass houses, a woollen factory, and three printing offices. Two handsome bridges across the Muskingum, connect the town with West Zanesville, and Putnam, so as to identify them with the town. Taken altogether, the inhabitants amount to more than 4,000. It contains beside, a handsome court house, twenty-one mercantile stores, a Presbyterian, Baptist, Catholic, and a Methodist church, and three hundred and seventeen dwelling houses, some of which make a show of splendor. Zanesville is beginning to manufacture largely in iron, and promises to become one of the principal manufacturing towns in Ohio. It is situated in N. latitude 40° , W. longitude $5^{\circ} 2'$, eighty miles westerly from Wheeling, in Virginia; sixty-one north-westerly from Marietta; seventy north from Chillicothe; and fifty-eight east from Columbus.

Chillicothe, the county town of Ross county, is handsomely situated on a level alluvial plain on the west bank of Scioto, forty-five miles in a right line from its entrance into the Ohio. The town is bounded on the north by the Scioto, and on the south, at the distance of three quarters of a mile, by Paint creek. The principal streets run parallel with the course of the Scioto. It is laid out with great regularity, the principal streets crossing each other at right angles. It was laid off in 1796, and contains 2,827 inhabitants. It contains two printing offices, a bank, twenty mercantile stores, and two medical stores. It has also four cotton spinning factories, a rope walk, an oil mill, a fulling mill, several saw mills, a paper mill, and a number of flouring mills, including one of steam power, either in the town or in the immediate vicinity.

The Presbyterians, Methodists, and Seceders, have each a church. It has also an academy, court house, jail, and a stone market house. From the summit of a hill, rising abruptly on the south-west side of the town, is a most delightful view of the town and circumjacent country, interspersed alternately with woods and lawns, through which the Scioto pursues a winding course to the Ohio. This town is in the centre of the beautiful and fertile Scioto country. The situation is favorable, and every way delightful; but yet it did not flourish, until the grand canal was cut through the town, since which it has received a new impulse towards prosperity, promising that it will attain the importance to which its fortunate position entitles it.

In the midst of this town formerly stood one of the most interesting mounds of the cone shaped form. In levelling it for the purpose of building lots, great quantities of human bones were found in it. Chillicothe, is fifty-five miles south of Columbus; seventy-five north-east from Mayaville, in Kentucky; and ninety-three north-east from Cincinnati. N. latitude $39^{\circ} 20'$, W. longitude $85^{\circ} 53'$.

Marietta, the seat of justice for Washington county, is beautifully situated on the Ohio, a little above the mouth of Muskingum river. It contains two churches, an academy, the public county buildings, two printing offices, a bank, twenty stores, about ninety houses, and the whole township 1,914 inhabitants. The people are noted for their industry and sobriety, and the politeness and urbanity of their manners.

Ships were formerly built here; but from some cause the business has been discontinued. The soil is exceedingly fertile around the town, and it has many advantages of position. But it has not flourished like some other towns. One cause may be, that it has experienced more than once inundations of the river, in some of which the water has risen in the principal streets eight or ten feet. Great numbers of buildings, barns, and cattle, were swept away. It has also experienced severe sickness. But its extraordinary fertility, and its natural advantages will cause it to become a large town. It was one of the first settled towns in the state, and was originally laid out by the Ohio Company, in 1787. In the following spring, it was settled by eight families. The first settlers were from New England. Among the founders of this establishment was General Putnam, whose name and character are recorded in the annals of the state. It is 316 miles from Washington; 93 from Chillicothe; 186 from Cincinnati; and 109, south-eastwardly from Columbus. N. latitude $39^{\circ} 25'$, W. longitude $4^{\circ} 28'$.

Lancaster, the seat of justice for Fairfield county, situated nearly in the centre of it, is entirely an inland place. It is near the source of Hockhocking river, on the road from Zanesville to Chillicothe. It is a

large, handsome, and well built village. A considerable number of its inhabitants are Germans. It contains two hundred and fifty houses, and 1,535 inhabitants. It has a number of public buildings, as a court-house, town house, masonic hall, an academy, several respectable schools, four churches, twelve stores, a bank, and two printing offices, from each of which are issued two weekly papers, in the English and German languages. It is a place of great mechanical enterprise and industry, and connected, as it is, by a lateral cut, with the great Ohio and Erie canal, it will no longer suffer from the inconvenience of its inland position, and will become a place of importance. It is central to a large and populous country, and is situated twenty-eight miles south of Columbus; and thirty-six south-westerly from Zanesville.

New Lisbon, the seat of justice for Columbianna county, is situated on a branch of the Little Beaver, four miles from the Ohio. It contains a court house, jail, bank, two churches, six public houses, nine stores, and in the township, 2,183 inhabitants. It has four merchant, and four saw mills, a paper mill, two woollen factories, a filling mill, and carding machine. It is situated fifty-six miles north-westerly from Pittsburgh; and one hundred and sixty north-easterly from Columbus. N. latitude $40^{\circ} 46'$; W. longitude $3^{\circ} 52'$.

Gallipolis is the chief town of Gallia county. It has a court house, jail, two churches, an academy, three steam mills, a printing office, eighty houses, and twelve stores. It was originally settled by French immigrants. They had been deceived by speculators, and suffered severely by bilious fevers, in becoming acclimated. Some left in discouragement, many died, and the number of the original French settlers is small.

St. Clairsville is an inland town, the county town of Belmont county, and is situated on elevated ground, surrounded by hilly, but fertile lands. It has a court house, jail, market house, printing office, a bank, fifteen stores, and 800 inhabitants. It is on the great road from Wheeling to Cincinnati, and distant eleven miles west from the former place.

Portsmouth, the chief town of Scioto county, is situated on the eastern bank of the Scioto, just above its junction with the Ohio. A great amount of commission business for the Scioto country is done here; and the position for internal commerce with the state is exceedingly advantageous. There is a bank, court house, jail, printing office, eighteen stores, a book store, four commission stores, one druggist, twenty mechanical establishments, two churches, a steam mill, a market house, and 1,063 inhabitants. The great Ohio canal here communicates with the Ohio, which must at once render this town a place of great consequence. It is forty-five miles south of Chillicothe, and ninety in the same direction from Columbus. N. latitude $38^{\circ} 48'$, W. longitude $5^{\circ} 53'$.

Circleville, on the east bank of the Scioto, is the county town of Pickaway county. In the limits of the town are two Indian mounds, the one square, and the other circular. The town derives its name from being chiefly built in the limits of the circular mound. These mounds are among the most interesting in the western country, and are described elsewhere. The town contains a handsome court house, a printing office, market house, ten stores, and various mechanic shops. The rich Pickaway plains or prairies are near this place. The adjacent wooded lands of Lower Walnut creek, are equally rich; and this town, central to such extents of fertile soil, must become of importance. The Ohio canal passes, and here crosses the Scioto by the largest aqueduct on the line of the canal. It has recently exhibited a rapid progress, and contains 1,100 inhabitants. It is situated twenty miles south of Columbus, nineteen north of Chilli-cothe, and twenty miles west of Lancaster. N. latitude $39^{\circ} 26'$, W. longitude $5^{\circ} 53'$.

Urbana is the county town of Champaign county, near Mad river. It contains a court house, jail, printing office, a Methodist and Presbyterian church, a market house, nine stores, one hundred and twenty houses, and 1,003 inhabitants. It is distant forty-three miles north-west from Columbus. N. latitude $40^{\circ} 3'$, W. longitude $6^{\circ} 4'$.

Xenia, the county town of Green county, is situated on Shawnee creek, and contains a court house, jail, three churches, two printing offices, ten stores, and 919 inhabitants. It is distant fifty-six miles south-west from Columbus.

Dayton, the chief town of Montgomery county, is charmingly situated on the eastern bank of the Great Miami, just below the confluence of Mad river, near where the Miami canal connects with the Miami. The waters of Mad river are artificially conducted from that river to the Miami, so as to afford a great number of mill seats.

It contains two hundred and thirty-five houses, and one hundred and thirty-five shops and stores, total three hundred and seventy; four churches, a court house, a market house, and jail. In 1810, the population was 383; in 1820, 1,139; in 1830, 2,934. The population of the township is 6,583. In 1828, seventy buildings were erected, and probably a greater number last year. No town in the state affords more extensive water privileges, which are partly occupied by a number of saw mills, grist mills, cotton factories, and various sorts of machinery moved by water.

The striking increase of its prosperity is owing to its being the terminating point of the Miami canal, connecting it with Cincinnati. It is central to a rich and populous agricultural country, the trade of which this town commands. It is expected that the canal will be continued to lake

Erie. It is situated sixty-eight miles south-west from Columbus, and fifty-two by land, and sixty-seven by the canal from Cincinnati. N. latitude $39^{\circ} 46'$.

Lebanon is the county town for Warren county. It is between two small branches of Turtle creek. It has the usual public buildings, two churches of brick, and a jail of stone, two market houses, a bank, a printing office, and a respectable social library. The surrounding country has fine land. It contained in 1820, 1,079 inhabitants. It is distant eighty miles south-westerly from Columbus, and thirty miles north-easterly from Cincinnati. N. latitude $39^{\circ} 25'$, W. longitude $7^{\circ} 5'$.

Athens is the county town of Athens county. It is situated on an elevated bluff, in a bend of the Hocking, in a position equally beautiful and healthy. In this village is located the Ohio University. There is already erected for the accommodation of this institution a handsome edifice three stories high. The funds, the library, and philosophical apparatus are respectable; and it promises to be an institution of great utility to the interests of the literature of the state. The town contains forty houses, a number of stores, a court house, a jail, and has several mills on the river in its vicinity, and 750 inhabitants. It is seventy-three miles south-east from Columbus, forty-one westerly from Marietta, and fifty-two east from Chillicothe. N. latitude $39^{\circ} 23'$, W. longitude $5^{\circ} 5'$.

Cleveland, situated on the southern shore of lake Erie, is the county town of Cuyahoga county. Its position is at the mouth of Cuyahoga river. During the late war it was a depot of provisions, and a place where many boats and lake crafts were built; and it is a noted point of embarkation of the lake. It is a growing place, having four churches, a court house, jail, an academy, one hundred and eighty houses, forty stores, nine groceries, six taverns, and 1,200 inhabitants. It is distant one hundred and thirty miles westward from Pittsburgh, and one hundred and fifty north-easterly from Columbus. N. latitude $41^{\circ} 31'$, W. longitude $4^{\circ} 44'$. The great Ohio canal here connects with the lake, and passes through the central parts of Ohio, preserving for some distance a course parallel to the Scioto, and finally connecting with the Ohio near the mouth of that river. This town, intermediate between Buffalo and Cincinnati, and the depot of the vast amounts of merchandise destined east and west, will not fail soon to become an important town.

Sandusky, in Huron county, on the southern shore of Sandusky bay, is one of the most important ports on lake Erie. Its area rises gradually from the lake, of which, its passing sails, and the surrounding country, it commands a charming view. Though a new place, it has ten stores, a printing office, the usual number of mechanic establishments, public houses, a ship yard, a rope-walk, and nine wharves. This is one of the

chief points of landing and embarkation between the Mississippi valley and New York, Buffalo, and Detroit. In 1828, 1,319,822 dollars worth of merchandise was landed here. In 1830, there were over five hundred arrivals at this port, and about two thousand wagons despatched with dry goods and groceries, for all points of the Ohio and Mississippi country below. A turnpike, now constructing, will connect this town with Columbus. It is distant seventy miles south from Detroit, two hundred and thirty south-west from Buffalo, sixty west from Cleveland, and one hundred and six north from Columbus. N. latitude 41° 27'. The principal harbors on lake Erie are Put-in-Bay, Maumee Bay, Fair Port, and Ashtabula creek.

Ashtabula, a post town of Ashtabula county, is situated two miles from the entrance of Ashtabula river into the lake, and has a post office, tavern, two churches, a weekly newspaper, and five stores. A turnpike connects it with Warren, the seat of justice for Trumbull county. A sloop loaded with a certain kind of boards for clock-making, departed from this place down the lake, the New York canal, the Hudson and Long Island Sound, and arrived, after a passage of twenty-five days, at New Haven, Connecticut. A schooner, burthen 49 tons, departed from Huron county and arrived at New York.

Baltimore, in Fairfield county, 25 miles south-east from Columbus, is situated on the Ohio and Erie canal, and has grown to be a respectable village within the three past years. It already contains 200 houses, six stores, a great number of mechanic establishments, and 500 inhabitants.

Massillon, in Stark county, on the east branch of Tuscarawas, was laid out in 1826, and grew into immediate consequence from being for a considerable time the termination of the Ohio and Erie canal. It contains a printing office, eight stores, two merchant flour mills, four warehouses, and a woollen factory. It is one hundred and eleven miles north-east from Columbus.

Newark is the county town of Licking county. It is situated on the Ohio and Erie canal, one hundred and seventy-six miles distant from its outlet in lake Erie. It contains two hundred and fifty houses, ten stores, two printing offices, two warehouses, a market house, a church, and the usual county buildings. It is thirty-three miles north of Columbus.

Canton, the county town for Stark county, contains two hundred dwelling houses, two hundred and fifteen families, 1,496 inhabitants, two printing offices, two churches, six schools, five ministers, fifteen stores, and the usual number of mechanic shops. It is one hundred and twenty miles north-east of Columbus.

Warren, New Philadelphia, Wooster, Mansfield, Coshocton, Somerset, Delaware, Worthington, Franklinton, Hillsboro' Piketon, Springfield,

Pickaway, Troy, Eaton, Hamilton, and New Richmond, are most of them county towns, and some of them will compare in size with those we have mentioned.

Fifty other incipient villages might be named, which are rapidly growing to consequence, and which, seen by the traveller, excite surprise that he has not heard them named. Such is the march of town making and population, that the scene is shifting under the eye, and the description of towns and villages, that is accurate this year, may be wide from accuracy the next. Another inconvenience results from this order of things. Towns are originated in such numbers and rapidity as to have outgrown the invention of the founders. For example, there are nineteen townships of the name of Jefferson, and twenty-four of the name of Washington. Other names of places are repeated from four to ten times. While this circumstance is unfavorable to the right direction of missives sent by mail, it argues strongly the matter of fact character of the people, who can make fields, towns, mills, and legislators, easier than the latter can task their invention for names.

The following military positions occur so often in the history of this state, that we deem it important to give their relative position. Fort Defiance is situated at the junction of Au Glaize and Maumee rivers, fifty miles south-west of Fort Meigs. Fort Loramie is on the head waters of the Big Miami, and one of the boundary positions referred to in the Greenville treaty. Fort Meigs was erected in 1813, on the south-eastern bank of the Maumee, a few miles from its mouth, at the lower rapids of the river, distant southerly from Detroit seventy miles. It is noted for the siege which it sustained from the British and Indians in April and May, 1813. Fort Recovery was established by General Wayne. The disastrous defeat of our troops commanded by general St. Clair, by the Indians, occurred here, in 1795. It is situated twenty-three miles northwardly of Fort Loramie. Fort Greenville is one of the most noted points in the history of Ohio, and was one of the first fortifications erected in the country. It is in the present limits of Darke county, and within a few miles of the western limits of this state. Here, in 1795, was concluded the celebrated treaty of General Wayne with the savages, after his memorable victory over them. From this treaty, the country began to increase in population.

Roads and Canals. The common public roads, as might be inferred, are too numerous to be named. The country being level, they seldom have the inconvenience of being hilly; but the soil being deep and loamy, and most of them little wrought, in wet weather and in winter they are exceedingly bad. There are five considerable turnpikes, besides many shorter ones. The length of the first is sixteen miles; and the second

forty-eight; of the third fifty-one; of the fourth one hundred and six. This connects Sandusky with Columbus, and is not yet complete. The fifth is the McAdamized road leading from Cincinnati to the interior, of which the first division only is completed. The national road is completed thirty or forty miles west from the Ohio, and is McAdamized in the best manner.

The grand canal, connecting lake Erie and the Ohio, passes nearly through the centre of the state, from Cleveland on the lake to Portsmouth on the Ohio. The whole distance is three hundred and six miles. Lateral cuts are made, or making, amounting to forty miles more. The canal is of the same depth, and dimensions, and construction with the great New York canal. It is now completed, and in full operation. This wonderful work of uniting the waters of the Mississippi and Atlantic has already imparted a new aspect to the country through which it passes, and has in many places quadrupled the value of the land near its course.

The Miami canal, sixty-seven miles in length, connects Cincinnati with Dayton. To this a considerable lateral cut is expected to be made from Lebanon. Others are in contemplation. These noble and beautiful modes of transport will soon supercede the draught of beasts of burden, on deep and muddy roads, in all practicable directions. The cost of these canals will be between three and four millions of dollars.

Surveys have been made, and grants of land from the General Government obtained for continuing the Dayton canal to lake Erie.

Militia. Few descriptions of the inhabitants are exempted from military duty. The militia of this state is principally composed of hardy agriculturists, and exceeds 150,000 men.

Penitentiary. This establishment, at Columbus, is a humane and efficient one. Of the great numbers who have been confined here, nearly half have been pardoned out.

Government. The legislative authority is vested in a Senate and House of Representatives, both of which, collectively, are styled the General Assembly of Ohio. The members of both branches are elected by counties, or districts composed of counties, according to population. The representatives are chosen for one year; and for eligibility a man must be at least 25 years of age, have resided in the state at least one year, and paid a tax. Their number must not exceed seventy-two, nor be less than thirty-six. The Senate is composed of members elected for two years, who must not exceed one-half, nor fall short of one-third of the number in the House of Representatives. The present number are thirty-three Senators, and sixty-nine Representatives. A Senator must be at least thirty years of age, and have resided two years in the district from

which he is chosen. The General Assembly has the sole power of enacting all the state laws,—the assent or signature of the Governor not being necessary in any case whatever.

The judiciary system comprises three several grades of courts, viz: The Supreme Court, Court of Common Pleas, and Justice's Courts. The justices of the peace are chosen triennially by the people themselves, in each township respectively. They are conservators of the peace throughout the country; but have no civil jurisdiction out of their townships. The state is divided into nine judicial circuits for courts of Common Pleas, in each of which is a presiding judge, styled President; and in each county of which the district is composed, three associate judges, all elected by the legislature, for seven years. These courts are held three times a year in each county. The Supreme Court consists of four judges, who hold a court once a year in each county throughout the state. They are likewise chosen by the legislature for seven years.

The supreme executive authority is vested in a Governor chosen biennially by the people. He must be thirty years of age, and have resided in the state at least four years. He is commander-in-chief of the militia, and commissions all officers in the state, both civil and military. In case of disability, or vacancy in his place, the Speaker of the Senate acts as Governor, until the next succeeding regular election. The qualifications of a freeman are the age of twenty-one, residence in the state, and the payment of a tax.²

In whatever aspect we contemplate this wonderful state, the mind is affected with surprise and pleasure. We experience surprise, for the history of colonies affords no similar example of a colony of equal numbers, improvement and prosperity so rapidly springing from a solid forest wilderness, with no adventitious aid, except the fertility of its lands, the freedom of its institutions, and the enterprising character of the American people. The real lover of freedom, who firmly believes in the strength and perpetuity of our institutions, contemplates the prospect with unmingled pleasure. Ohio, all things considered, and her character and institutions carefully analyzed, is the most completely democratic community with which we are acquainted. Here, if the enemies of democracy were to be credited, ought to be found the most revolting effects of ferocity and misrule. Insurrection, and anarchy, and lawless violence should be the order of things. This state, on the contrary, is making great exertions to diffuse general education; and there is not, perhaps, in the world, a more peaceable and orderly community, or one where the people are more entirely obedient to the laws.

WEST PENNSYLVANIA.

THAT part of Pennsylvania watered by the Ohio and its branches, is situated west of the great dividing ridge of the Alleghanies, that separates the waters of the Atlantic from those of the Ohio. Among these ridges, the principal are Peter's Mountain, Tuscarora Mountain, Sideling Hill, Jack's Mountain, and Bald Eagle Ridge. West of these is the Great Alleghany Ridge, which separates between the eastern and western waters. The base of this ridge is 1,000 feet above the level of the sea, and the elevation of the mountain above the base is from 1,000 to 1,500 feet. About one-third of the surface of Pennsylvania is west of these mountains, and watered by the Ohio and its waters. The face of the country generally is hilly, rolling, and in some places mountainous. Except in the regions about lake Erie, very little of West Pennsylvania can be called level. West Pennsylvania contains considerably more than 200,000 inhabitants.

There is a college at Cannonsburgh, in an elevated and pleasant situation. It is an institution of considerable importance, but too near the college at Washington to admit the supposition that both the institutions can flourish. The college edifice makes a respectable appearance. The college at Washington is situated in that pleasant village, in the centre of a populous and thriving country. It has a collegiate foundation, considerable funds and endowments, and has graduated between twenty and thirty students in some years.

The system of common schools in West Pennsylvania does not materially differ from that east of the mountains. There is less inequality of condition among the people, and the modes of conducting schools are more similar to those of New England.

The inhabitants are generally a hardy, robust, and industrious race, in their habits, pursuits, and modes of thinking, as well as their persons, much resembling the people of New England. The climate, though something milder, is not much unlike that of Connecticut. The people, like those of New England, are generally addicted to habits of religious worship, and to connecting themselves to some religious society. Their trade is with Pittsburgh, or Canada; and New York, by the way of lake Erie. Besides the county towns, West Pennsylvania contains the following considerable villages. Conneksville, on the east side of the Youghiogony, noted for the important mills and manufactures in its neighborhood, contains 800 inhabitants.

Brownsville is situated on the east side of the Monongahela river. The great national road passes through it. It is surrounded with fine orchards and fields, in a rich, picturesque, and romantic country, and has some fine stone buildings in and about it, and about 1,200 inhabitants. Bridgeport is a village opposite to Brownsville. Cannonsburgh is on the west side of Chartier's creek, eight miles north of Washington. It is surrounded by a hilly, but fertile country. Erie, beautifully situated on the south side of lake Erie, is a thriving village. It is a stopping place for steam boats that pass up the lake, and used to be called Presq' Isle. It is the seat of justice for Erie county, and in N. latitude $42^{\circ}21'$, one hundred and twenty miles north of Pittsburgh. A portage from the lake to the navigable waters of the Alleghany river, commences here. The distance is fifteen miles, and the two places are connected by a turnpike. Immense quantities of salt used to be transported over this portage. It was brought from the great saline in New York, and was sent down the Ohio, for the supply of the country on its waters. But salt is now made so cheaply and abundantly on the Ohio and its waters, that this trade is in a great measure suspended. A great deal of trade, however, still passes this way, both that of articles for New York from the western country, and of articles sent from New York to the western country. In the year 1809, fifty-two thousand barrels of salt were sent across this turnpike to Pittsburgh.

Waterford is situated on the north bank French creek, a considerable river of the Alleghany; and is the place where the portage from Erie terminates. It is a village of considerable business, and has a post office, a number of stores and commission warehouses, and is fifteen miles south of Erie. Meadville is near French creek, and has several stores, inns, and public buildings, a post office, and printing office, two churches, and a college, formerly under the care of the Rev. Mr. Alden. Dr. Bently, late of Salem, Massachusetts, bequeathed a very considerable library to this college. Franklin, Kittanning, and Freeport, are considerable villages.

between this place and Pittsburgh. A considerable tract of country in the south-west angle of New York is watered by the head waters of the Alleghany. In New York principally, and along the upper courses of the Alleghany, are found those deep and noble pine forests, whence are carried the boards and lumber which supply the greater part of the demand for this article in all the western country, and quite to New Orleans. Nearly 30,000,000 feet of plank descend the Alleghany annually. In return, keel boats carry back whiskey, iron, castings, cider, apples, bacon, and many other domestic articles. The brig Dean, and the Sally Ross, and several other vessels of burthen have been launched on the Alleghany, and have descended thence to New Orleans. The Alleghany is four hundred yards wide at its mouth. Among the natural curiosities in this region is Oil creek, which enters into the Alleghany. The spring source of this creek yields great quantities of bituminous or unctuous matter, like petroleum, and probably is that substance. It is taken internally, as a medicine; and the rheumatic find relief by bathing the joints affected with that complaint, with this oil. Many people at Pittsburgh keep this oil in bottles, and attach much confidence to it, as containing some mysterious efficacy.

All parts of the western country seem admirably accommodated the one to the other; the one part supplying what the other wanted. The country on the Alleghany is much of it broken, sterile, and not calculated to become a rich farming country. It contains inexhaustible supplies of the finest lumber, and innumerable mill seats. Pittsburgh, and the country below it, can amply supply all the wants of this region, as regards produce, manufactures, and articles of iron fabric. In return, mills with water-power, are very uncommon about Pittsburgh, and the adjacent country naturally calls for the lumber of the Alleghany. Steam boats have recently ascended this river almost to its source.

In describing the Alleghany and its waters, we have named the principal streams from Pennsylvania and New York, that swell that fine river. There is one creek that we have not mentioned, a tributary of the Alleghany, that deserves mention were it only for the name, Muhlbuctium.

Economy, the present seat of Mr. Rapp's establishment, formerly at New Harmony, is on the north bank of the Ohio, eighteen miles below Pittsburgh. It contains many factories, a large church, a commodious hotel, a museum containing a music room and dining hall, all laid out with the utmost neatness and regularity, and 850 inhabitants. At the east end of the town is a park containing deer, a large vineyard and a beautiful orchard. It is almost exclusively a manufacturing establishment. It is a community of a peculiar character.

Pittsburgh, in the extent of her manufactures, is the only rival of Cincinnati, in the west. In population, wealth, and importance, it is next to that city; and the third in the valley of the Mississippi. A more charming spot for the site of a city could scarcely be selected. No place is surrounded by more charmingly rounded and romantic hills; and the boundless view of hill and dale, the Alleghany bringing down its northern tribute on the one hand, and the Monongahela its southern offering on the other, the singular bluffs of these rivers, their conjunction, the broad and beautiful Ohio, calmly commencing its course of one thousand miles, and winding away among its deep forests, and shores shaded by noble sycamores, the town, its surrounding valleys, and the whole scene taken together, its seen from the adjoining hills, constitute as fine a landscape as can well be imagined. The town is built on an alluvial plain, in the delta of the two rivers, where they unite to form the Ohio. Over the Alleghany is a high and beautiful plain, bounded in the distance by bold and rugged hills. The coal hill, across the Monongahela, rises more than three hundred feet; and almost perpendicularly impends the town, between it and the river. On the Monongahela side, is a manufacturing village, called Birmingham; and to match it, on the Alleghany side another manufacturing town. Both are connected with the city by noble and long bridges over these two rivers.

It is well known that the site of this town was selected at an early period in the French wars, as an important point in the great chain of posts which was to connect Canada with Louisiana. It had been, for a considerable time, a depot of French goods for the savages, a place of outfits for the trade of the Ohio, and a military post, to defend the country against the occupancy and settlement of the English, and to secure to the inhabitants the monopoly of the trade with the savages, when Braddock was sent to dispossess the French, and capture the post of Fort Du Quesne, as it was then called. After the fatal battle, in which he was mortally wounded, and in which Washington gained his first laurels, Colonel Grant with eight hundred Caledonians was defeated here on the hill, which still bears his name. Not long after, it came into the possession of the British, and they built a fort at the expense of sixty thousand pounds sterling. It was built under the superintendence of Lord Stanwin. In 1760, a considerable town arose about the fort. Beautiful gardens and fruit orchards were planted; but on the breaking out of the Indian war, in 1763, the inhabitants again retired into the fort. The present town of Pittsburgh dates back to 1765. Its plan was enlarged, and it was re-surveyed in 1784. It then belonged to the Penn family, as a part of their hereditary manor. By them it was sold. The Indian wars, and the

troubles in the western country, prevented its rapid growth, until the year 1793. Since that time, it has increased on the same scale of improvement with the most growing towns of the west.

It is supplied with water by a high pressure steam engine of 84 horse power, which raises the water one hundred and sixteen feet above the Alleghany river. A million and a half gallons of water can be raised in twenty-four hours. These works went into operation in 1828.

The churches in this city are a Baptist, Roman Catholic, Covenanters', Seceders', a Methodist church, German Lutheran church, Union church, Episcopal church, first and second Presbyterian churches, Unitarian church, second Methodist church, and an African church, making a total of thirteen. The other public buildings are the Western University of Pennsylvania, Pittsburgh High School, Pittsburgh Exchange, Mansion House and Hotel, Lambdin's museum, the U. S. Bank, and the Pittsburgh bank. There are eleven large establishments of iron founderies, in which were manufactured from pigs, in 1830, five thousand three hundred and thirty-nine tons. There are six rolling mills and iron works with nail factories attached, in which were manufactured, in the same year, seven thousand nine hundred and fifty tons of pigs into blooms; and two thousand eight hundred and five tons into nails. There are four large cotton factories, in the largest of which are ten thousand spindles, spinning one thousand four hundred pounds of yarn weekly. There are two large establishments of glass works; and two hundred and seventy other large manufacturing establishments of a miscellaneous character. The suburbs of Pittsburgh are Alleghany Town, Northern Liberties, Birmingham on the south bank of the Monongahela, Lawrenceville, East Liberty, and remainder of Pitt township. Population of the city proper, 12,540, and of the suburbs, 9,983. Total, 22,433.

The town is compactly, and in some streets, handsomely built; although the universal use of pit coal for culinary and manufacturing purposes has carried such quantities of fine black matter, driven off in the smoke into the air, and deposited it on the walls of the houses, and every thing that can be blackened with coal smoke, as to have given the town a gloomy aspect. Its position and advantages, as a manufacturing town, and its acknowledged healthfulness will continue, however, to render it a place of attraction for builders, manufacturers, and capitalists.

At the present time, the following articles are manufactured on a great scale. Iron-mongery of every description, steam engines, and engineering, and iron work in general; cutlery of all descriptions; glass and paper; cotton and woollens, pottery, chemicals, tin, and copper ware are manufactured, and exported to a great extent. Boat and steam boat building have been pursued here on a greater scale than in any other town in the

western country. So long ago as 1814, 4,055 wagons of four and six horses, employed as transport wagons, passed between this place and Philadelphia. Boats of the smaller kinds are continually departing down the river at all seasons, when the waters will admit. In moderate stages of the river, great numbers of steam boats arrive and depart. Of course, this place transacts a great amount of commission business for all the western country. Great contracts are continually ordered from all the towns on the waters of the Ohio and Mississippi, for machinery, steam boat castings, and the various manufactures, that this city supplies. The inexhaustible supplies of excellent pit coal, in all directions in the coal hills about the town, furnish great facilities for keeping in operation the great number of steam manufactories. The coal costs little more than the simple expense of digging; and there is no fear that the supply will either fail, or become difficult to procure. The present amount of the value of manufactures is supposed to be not far from 2,500,000 dollars annually. The market is rich and abundant; but much higher than in the towns lower down the Ohio. It is believed that the expense of articles in the Pittsburgh market will compare pretty accurately with those of Philadelphia. It is still a place of great resort for emigrants descending the Ohio. It has the disadvantage of having the river shallower in low water than at Wheeling. Flat and keel boats can descend the river from the latter place, in stages of water that would not admit of it from the former place.

Pittsburgh is more entirely a manufacturing place than Cincinnati; and more so than any other place in the West, or perhaps in America. It deserves the name, that has so often been bestowed on it, the Birmingham of America. Its prosperity probably depends less on the fluctuations of the markets, the changes of the times, and the vicissitudes of peace and war, than any other town in the country. Its manufactures are of articles of prime importance, and vital necessity, which must be consumed in all changes of times; and which this city, from its extensive operations, from its long practice and experience, and from the skill and practised talents of its manufacturers, can furnish on as good terms as any other place.

The inhabitants are a mixture of all nations. Germans and Irish predominate. But there are great numbers of English, Scotch, French, and Swiss, mechanics and artisans, who come here to bring their mechanical skill and industry to a better market than they could find in the old world. The habits of the people of the place are those of persevering industry, calculating carefulness, distrust of strangers, and a fixed purpose to look to their individual interests. They are of all the different denominations of religion, and as moral as could be expected of a people

so situated. Luxury, splendor, and display, are not much in fashion here; and the habits of all the people are frugal and economical. This city has immense advantages of artificial as well as natural water communications. The great Pennsylvania canal, over five hundred miles in length, terminates here. Another canal is laid out to connect it with lake Erie through Meadville; and still a third is proposed to the mouth of Mahoning, where it will connect with a branch of the Ohio and Erie canal from its summit head.

Pittsburgh is the seat of justice for the county of Alleghany; and is situated in N. latitude $40^{\circ} 30'$, W. longitude $4^{\circ} 40'$ from Philadelphia; three hundred miles north-west from Philadelphia; three hundred and fifty-two from Washington; three hundred and thirty-five from Lexington, Kentucky; one thousand one hundred from New Orleans by land; and two thousand by water.

WEST VIRGINIA.

WEST VIRGINIA probably bears a smaller proportion to the surface of the whole state, than the portion of the above mentioned state west of the Alleghany mountains, does to Pennsylvania. The Alleghany ridge here, as in Pennsylvania, separates the waters of the Ohio from those of the Potomac and the Atlantic. The names of the principal ranges, beyond this continued chain, are Chesnut Ridge and the Gauly mountains. The face of the country is similar to that we have been describing. A considerable portion is covered with lofty and precipitous mountains, and valleys embosomed within them. There is, however, much cultivable country. Many of the hills have table summits, and are capable of cultivation. On the whole it may be called a hilly country, with a salubrious atmosphere; and the people are tall, muscular, laborious, and frugal in their habits, having a much greater resemblance, in their general manners and habits, to the people of New England, than to the Virginians east of the mountains. In the dialect of the country, a dialect of universal use in the west, the people west of the mountains are called 'Coboes,' and those east of the mountains 'Tuckahoes.' Some of the planters have considerable gangs of slaves; but it is more common that the labor of the family is performed by the members of it. The people are more in the habit of forming themselves into religious societies, and attending public worship, than the people of the state east of the mountains. The staple products are wheat and the grains. It is a fine country for orchards, and there is considerable attention paid to the cultivation of fruit.

A great many streams rise in the mountains, and fall either into the Monongahela, the Kenhawa, or the Ohio. The Kenhawa is the only river of any importance. It rises in the Alleghany mountains. One of its principal branches, the Green Briar, almost interlocks with the head waters of the James' River, and with those of the Holston of Tennessee. The river is four hundred yards wide at its mouth, and in moderate stages of the water, is boatable by large boats to the falls, seventy miles above its mouth. Forty miles above its mouth, and near Charlestown, commence the most extensive salines in the western country. There are a great number of furnaces constantly evaporating the water. The water is found for a considerable distance round the works. To obtain it they bore from one to two hundred feet deep in the earth. It is so strongly saline that from sixty to ninety gallons only are required for a bushel of salt. It is remarkable, that in boring for this water, when the augur had pierced the different strata of earth, and had reached the salt water, it spouted up twenty feet in the air. The quantity made at present at these works, is from 500,000 to 700,000 bushels annually. It is, indeed, a kind and wonderful provision of Providence, that such an ample and easy supply of an article so important and indispensable, should have been thus bountifully supplied by nature, at such remote distances from the sea.

Chief Towns. Wellsburgh, formerly called Charlestown, is the county seat of Brooke county. It is handsomely situated on a high bank of the Ohio. It contains one hundred houses, a court house, jail, post office, academy, a number of inns, several stores, and two or three large warehouses, from which are shipped large quantities of flour for the market at New Orleans. There are a number of valuable merchant mills in this vicinity, that ship their flour from this place. It is a place of considerable embarkation on the Ohio. Some considerable manufactures of glass and earthen or stone ware are carried on here. It is situated fifty miles south-west from Pittsburgh.

Wheeling, the county town of Ohio county, is situated on a high and gravelly but alluvial bank of the Ohio, a little above the mouth of Wheeling creek. The town is surrounded by bold and precipitous hills, which are generally covered with a fine verdure, and contain inexhaustible quantities of pit coal. These hills come in so near the river as to leave rather a small area for the town. The great national road from Baltimore terminates here, or rather is continued on the opposite side of the Ohio. Stages and public roads connect it with Pittsburgh. It is the first town on the Ohio where certain embarkation, in small flats or keels, may be calculated upon in low stages of the water. It has a fine surrounding country. There is a great deal of rich land back of it, along Wheeling

creek. These circumstances, united to its favorable position on the Ohio, impart many advantages to Wheeling. Of course, few towns on the Ohio have grown more rapidly. A number of mail stages arrive and depart here; and its situation in regard to the Ohio, and the national road, cause that it is a place of great and constant resort for travellers. It has a court house, jail, banking house, a Presbyterian and Methodist church, a market house, a book store, a printing office, a Lancastrian academy, a library, and a number of inns, some of them highly respectable. It has a large number of stores and commission ware houses, six hundred dwelling houses, and 5,111 inhabitants. It has manufactories of cotton, glass, earthen ware, and a number of considerable establishments of mechanical fabrics of the common kinds. Flat and keel boats are built here; and recently a number of steam boats of the first class. There are many reasons to suppose that this place will eventually become one of the most considerable on the Ohio. The other villages in West Virginia, on the Ohio and its waters, are Belleville, Point Pleasant, Greenville, Abingdon, Jeffersonville, Franklin, and Jonesville.

(Note) The territory of Michigan was organized by an act of Congress, approved March 3, 1820, and was at first a part of the territory of Indiana. It was separated from Indiana by an act of Congress, approved March 3, 1836, and was then a separate territory. It was admitted to the Union as a state on January 26, 1837, and was then a part of the state of Michigan. The territory of Michigan was organized by an act of Congress, approved March 3, 1820, and was at first a part of the territory of Indiana. It was separated from Indiana by an act of Congress, approved March 3, 1836, and was then a separate territory. It was admitted to the Union as a state on January 26, 1837, and was then a part of the state of Michigan.

MICHIGAN TERRITORY.

Length, 250 miles. Breadth, 135. Square miles, 83,950. Acres, 21,600,000. Between $41^{\circ} 31'$ and $45^{\circ} 40'$ N. latitude; and between $50^{\circ} 12'$ and 10° W. longitude. Bounded on the north by the straits of Michilimackinac; east by lakes Huron, St. Clair, and Erie, and their waters; south by Ohio and Indiana; and west by lake Michigan.

CIVIL DIVISIONS.

<i>Counties.</i>	<i>County Towns.</i>	<i>Distances from Detroit.</i>
Barry,	Niles,	179 miles.
Berrien,	Bronson's Prairie,	133
Branch,	Menomonic,	
Brown,		
Calhoun,		
Cass,	Edwardsburgh,	169
Chippewa,	Sault de St. Marie,	356
Crawford,	Prairie du Chein,	
Eaton,		
Hillsdale,	Sylvanus,	106
Ingham,		
Ioway,	Helena,	
Jackson,	Jacksonopolis,	77
Kalamazoo,	Prairie Ronde,	
Lapeer,		
Lenawee,	Tecumseh,	63
Macomb,		

Michilimackinack,	Mackinack,	320
Monroe,	Monroe,	36
Oakland,	Pontica,	26
Saganum,		
Sanilac,		
Shianessee,		
St. Clair,	St. Clair,	59
St. Josephs,	White Pigeon Prairie,	
St. Marie,		
Van Buren,		
Washtenaw,	Ann Arbour,	42
Wayne,	Detroit,	

The census of 1830 gives the population of this territory as follows: Whites, 30,848; Slaves 270. Total, 31,128.

Michigan Territory is a large peninsula, something resembling a triangle, with its base resting upon Ohio and Indiana. Three quarters of its extent are surrounded by the great lakes, Huron and Michigan. It is generally a level country, having no mountains, and not many elevations that might properly be called hills. The centre of the peninsula is table land, elevated, however, not many feet above the level of the lakes, and sloping in every direction to them. But, though the general surface of this territory is level, there is far less swampy and wet surface, than in the northern belt of Ohio, adjoining the lakes. The country is divided into nearly equal proportions of grass prairies, like those of Indiana and Ohio, divided into wet and dry; and extensive and deep forests of trees of nearly the same classes with those in Ohio, except, that here there is an intermixture of white and yellow pine. A considerable belt of land along the southern shore of lake Michigan is sandy and sterile; and so swept by the bleak and desolating gale of the lake, as not to promise much in the way of cultivation. But a great proportion of the lands of this territory are of excellent quality, and it promises one day to be a populous country. The productions are the same as those of New York. Orchards flourish remarkably, and this will undoubtedly become a fine fruit country.

Rivers. This is a country watered by almost innumerable rivers and branches. From the levelness of the country, they are generally boatable almost to their sources. These rivers abound in the fine fish of the lakes; and the fisheries on them are no inconsiderable source of supply to the new settlers. We can only mention a few of the most important.

Grand river is the largest that enters lake Michigan. It rises in the south-east angle of the territory, and interlocks at its sources, or in its passage, with the waters of Raisin, Black, Mastigon, and Saginaw; and

enters the lake twenty miles north of the Raisin. It courses through forests and prairies abounding with game; and its bosom, at the proper seasons, is covered with wild fowls. Small boats reach its source, and by this and Huron rivers, periouges pass from lake Michigan to lake Erie. It has been proposed to connect it by a canal with the Saganum of lake Huron.

The St. Joseph heads in Indiana and interlocks with Black river, St. Joseph's of the Miami, Eel river, and Tippicanoe of the Wabash. It has a strong current and is full of islands, is boatable one hundred and fifty miles, and is two hundred yards wide at its entrance into the lake. There are most abundant fisheries on it. The Raisin derives its name from the great number of grapes that grow on its banks. Black river, Marame, Barbue, White, Rocky, Beauvais, St. Nicholas, Marguerite, Monistic, Aux Sables, Lasiette, Grand Traverse, Thunder river, Sandy, Saganum, St. Clair, Belle, and Huron are considerable streams that empty into the lakes. These rivers, like those of the Gulf of Mexico, before they enter the lakes, expand into considerable basins, caused, no doubt, by the conflict between the current of the rivers, and the surf of the lakes, meeting in a level and sandy soil. In the proper season, they are covered with abundant harvests of wild rice; and with innumerable flocks of wild fowls, that come here to feed upon it.

A great many Indians still reside in this country. But the tide of white immigration has recently set strong this way; and the banks of the Huron and the Raisin are rapidly covering with the clearings of the settlers. The strait of St. Clair, connecting that lake with lake Huron, is twenty-six miles long. It runs through a country partly prairie and partly forest. Deep groves of beautiful white pine are found along this strait. The strait of Detroit, connecting lakes Erie and St. Clair is twenty-four miles. It is navigable for large vessels, is studded with islands, and one of the most beautiful sheets of water in the world. Its current is nearly three miles an hour. It receives the rivers Rouge, Ecorce, Magaugua, and Brownstown. Five miles above the mouth of the Rouge is a ship yard. It has excellent lands on its banks. South of Huron river, the river Aux Cignes, Rocky creek, Aux Sables, and some other small streams enter the lake.

Raisin derives importance from the circumstance that it is more settled than any river in the country, except Detroit. It has also obtained a melancholy celebrity from the events of the late war. It has at its mouth extensive prairies, and wide tracts covered with wild rice. The French settlements on this river are conformable to their customs in Canada, Missouri, and Louisiana; that is to say, they are laid out in long and narrow parallelograms, two or three arpens wide in front, and from forty to one

hundred arpens deep. In this way they gratify their propensity for society, by having the fronts of their plantations resemble a continued village. There are fine orchards on this river. Its banks are covered with grape vines, and from the abundance of its grapes it receives its name.

Michilimackinack island is situated in the north west angle of lake Huron, in the straits between it and lake Michigan. It is considered among the most impregnable fortresses on the northern frontier. The British gained possession of it during the late war. It derives its name from an Indian word, implying 'the back of a tortoise,' which, in its form of rising from the lake, it resembles. The island is nine miles in circumference. The village stands on the south side of it, and on rising grounds back of it, the fort is situated. This is one of the most remote northern settlements in the United States. The fortifications are of great strength. The population of the island and its vicinity is about 1,000. The islands in lake Michigan are as follows: Manitou Island, near the eastern coast, is six miles long and four wide. The Castor Islands extend from Grand Traverse Bay nearly across the lake. Grosse Isle is five miles long, and from one to two wide. Bois Blanc is in front of Malden, and has been possessed by the British; and is one of the points of territory in question between our government and theirs. The bays on the east side of lake Michigan, are Sable and Grand Traverse. Those on the Huron coast are Thunder and Sagana. The last is forty miles in extent in one direction, and from eight to twelve in the other. Maumee bay resembles a lake; and is situated at the mouth of Maumee river. It is eighteen miles in circumference. In the interior of this territory are great numbers of small lakes and ponds, from which the rivers have their sources. The strait, which connects lake Huron and lake Michigan, is called Lac des Illinois, is fifteen miles long, of an elliptical figure, and subject to a tide, which has sensible fluxes and refluxes. The Indians that reside in this territory are chiefly the following: Ottowas, Miamies, Pottawatomies, Chippeways, and Wyandots. By different treaties they have made cessions of the greater part of the lands in this territory to the United States. They still retain considerable tracts of fine country; and have many reservations and villages, even among the settlements. Some of them have made no inconsiderable advances in cultivation, and the arts of civilized life. Most of the converts to Christianity in this region profess to be Roman Catholics. The Protestants have recently established missionary stations and schools among them. The savages of this region suffered much during the late war; and their numbers are clearly diminishing.

The climate of this region, in consequence of its being level and peninsular, and surrounded on all sides but the south with such immense

bodies of water, is more temperate and mild than could be expected from its latitude. The southern parts have mild winters, and the spring opens as early as in any part of the United States in the same latitude. The position of the northern part must subject it to a Canadian temperature. The winter commences here early in November, and does not terminate except with the end of March. At Detroit in 1818, the mean heat of January was 24° , and in 1820, the mean heat of July was 60° , of December, 27° . At Mackinack, the most northern settlement in the United States, the mean heat of October was 45° ; of November 32° ; and of December 21° .

Agriculture, Manufactures, Exports, &c. The eastern parts of this territory, from various circumstances, became first settled. Within the few last years a great mass of immigrants have begun to spread themselves over this fine and fertile country. Situated, as it is, between the west, the south, and the east, with greater facilities for extensive inland water communication than any other country on the globe, with a fertile soil, of which millions of acres are fit for the plough, with a healthful climate, and with a concurrence of circumstances, inviting northern population, there can be no doubt that it will soon take its place as a state, and rival its western sister states. Wheat, Indian corn, oats, barley, buck wheat, potatoes, turnips, peas, apples, pears, plums, cherries, and peaches, are raised easily and in abundance. It is a country more favorable to cultivated grasses than the western country. In short, it is peculiarly fitted for northern farmers. No inland country, according to its age, population, and circumstances, has a greater trade. A number of steam boats and lake vessels are constantly plying in this trade, which is with Mackinack, Detroit, Chicago, and Ohio. The amount of foreign exports in 1821, was 53,290 dollars.

Chief Towns. Detroit is the political metropolis, and the only town of much size in the territory. It is situated on the western bank of the river Detroit, eighteen miles above Malden in Canada, and six miles below the outlet of lake St. Clair. The banks are twenty feet above the highest waters of the river. The plain on which it is built is beautiful, and the position altogether delightful and romantic. The streets are wide, and the houses are of stone, brick, frame, and logs; and some of them make a very showy appearance. Three of the principal streets run parallel with the river, and are crossed at right angles by six principal cross streets. Several wharves project into the river. The United States' wharf is one hundred and forty feet long, and a vessel of four hundred tons burthen can load at its head. The public buildings are a council house, state house, United States' store, Presbyterian church, a Roman Catholic chapel, and some other public buildings. There are a number of stores, and others

building. Rents and the value of lots are rising; and the town exhibits marks of rapid population and improvement. It was almost entirely consumed by fire, in 1806; and the appearance of the new town is much superior to the old one. It is a place of great and constant resort of the Indians; and here the greatest numbers and the fairest sample of the northern tribes are seen. Though the lake boatmen, the *courcurs du bois*, and the huntsmen of the northern wilderness are not exactly the Bedouin Arabs, and the frightful scare-crows that Volney has described, it must be admitted, that living in the woods, being exposed to the heats and colds of the climate, and rowing on the rivers and lakes under the direct rays of the sun, are things not favorable to complexion and appearance; and Detroit can show many inhabitants sufficiently outré in their costume, and who have nothing in their appearance to recommend them. Respectable schools are now established here. A public journal issues from the press. Libraries are in contemplation. It must continue to increase with the influx of immigrants, and the extension of back settlements. It is the chief depot of the shipping of the lakes. A steam boat plies between it and Buffalo. The operation of the Erie canal has been favorable to the business and importance of this town, and of the whole country. The finishing of the Ohio canal will still farther enhance its business and prosperity. Detroit is evidently destined to become a considerable town. The population exceeds 2,000. The one half of these are French, the other half Americans, with a considerable sprinkling of foreigners from various countries. The other villages, that have received names, are Mount Clement, Brownstown, Monroe, Lawrenceville, Frenchtown, and the New Settlement.

Government. This is upon the common plan of the territorial governments. But it is easy to see that this territory will soon be in a condition to claim admission into the confederacy of the states. Every thing is yet in the commencement. The usual provisions are made for roads; and the country is so level that it will easily be susceptible of good ones. At present, transport and passage are almost entirely by water, for which this country furnishes greater facilities than any other of the same extent in the United States. Detroit is comparatively an ancient place. The French plantations along Detroit river exhibit the aspect of a continued village. They are laid out in the usual manner, two or three arpens in front, by forty or eighty arpens deep. The mansions have that foreign and interesting aspect, that French buildings and establishments naturally have to the American eye. They are embowered in ancient and beautiful orchards. All have the appearance of comfort; and some of them of splendor and opulence. There are few landscapes more interesting, few water excursions more delightful, than that from Detroit to the lakes;

along this broad, cool, and transparent river, studded with islands, and alive with fishes, in view of this continuous line of French houses and orchards, on either bank of the river. The French here have their customary national manners. They live in ease and abundance in the forests, and take very little thought about education or intellectual improvement. But every thing has changed in this region since it has become subject to the free institutions of the United States. A corporate body, styled the 'University of Michigan,' has been formed. They have power to institute colleges, academies, and public schools. The march of improvement in this and in all respects is rapid.

History. Michigan was originally comprised in the North-Western Territory. French missionaries were settled here as early as 1648. Detroit was founded by the French, in 1670. In 1763, this country, along with other possessions conquered from the French, came under the government of Great Britain. At the close of the Revolutionary war it became part of the territory of the United States. But the British government held possession of the military posts in it until 1796. In 1805, the country was formed in a distinct territorial government. On the breaking out of the late war, this country became the theatre of part of its operations. Mackinack was captured by the British, and Chicago surrendered to the savages. The disastrous and humiliating affair of the surrender of Detroit, by General Hull, occurred soon after, and the British held possession of it a year. The signal victory over the British fleet on lake Erie, and the subsequent defeat of the forces under General Proctor, by General Harrison, changed the tide of success; and Michigan again passed into the hands of the United States. It is now one of the principal points of immigration.

Sketches of the Lakes and the river Niagara. Although the territory of Michigan, and the lakes may not be considered as belonging to the great valley of the Mississippi, yet we have considered them as the external north-eastern limits of that prodigious basin. They evidently mark a part of its grand features. The lakes every where exhibit marks of having been formerly much higher than they now are, and vast alluvial tracts, beyond their present limits, indicate that their waters covered a much greater extent of country than at present. It scarcely admits a doubt, that by the Illinois and other tributaries of the Mississippi in that direction, the lakes discharged from the western extremity of lake Michigan into the Mississippi. Every person that has traversed the upper courses of the Illinois, remarks that the water line on the bluffs indicates the floods of the river to have been twenty feet above its highest present elevation. These vast bodies of fresh water, then, formerly discharged from one extremity into the gulf of Mexico; and from the other, into that

of the St. Lawrence. Even now, as we have already remarked, a few feet of excavation would empty them anew into the Illinois. These internalseas of fresh water therefore belong to the arrangement of the great Mississippi basin; and require a brief description, in order that we may mark the magnificent northern outline of the country, we have been describing.

Whatever theories may be adopted to explain the phenomena of recent submersion, that are seen over all the western country, little doubt can exist, that these lakes are the pools, that remain, as mementos of the extent of the agents employed in that work. They display a feature in the conformation of our country, that has no other parallel on the globe. They seem to be generally beyond the reach of prairies. Boundless forests encircle them. Their vast extent, the fierce and untamed character of the wandering hordes, that have hunted, fought, and fished around them for unknown ages, the terror of the winters that rule these regions of ice and storms, for so great a part of the year, the precipitous crags of secondary formation, that line their southern shores, and the black masses of primitive granite, that rise to impenetrable heights on the north, the remoteness of their extent beyond fixed human habitations, and almost beyond the stretch of the imagination, have connected with them associated ideas of loveliness, grandeur, and desolation. A line drawn through the centre of all these lakes, beginning with Ontario and ending with the lake of the Woods, would be not far short of a length that would measure the Atlantic. Their waters are uniformly deep, cold, pure, and transparent. They repose upon beds of granite. They have great abundance of fine fish. The country north of lake Superior, and the lake of the Woods, is one of stupendous cataracts, impassable swamps and morasses, rushing rivers, often confined in precipitous channels of black granite, exhibiting an aspect which would chill the heart of any one, except a savage, hunter, fisherman, or *coureur du bois*, in the description, much more in traversing it. We have a faithful and interesting account of these dreary regions in the narrative of Major Long's second expedition.

This chain commences on the north-east with lake Ontario. Its extent is one hundred and eighty by forty miles. At its eastern extremity, is a group of islands, known by the name of the 'Thousand Islands.' From this lake, we ascend by a strait, called Niagara river, a mile in average width, very swift and deep, and thirty-six miles long, to lake Erie. This is a broad and beautiful sheet of water, equally transparent with the former, but falling short of it in general depth. Its extent is two hundred and thirty by forty-five miles. In various central positions on this lake, the voyager is out of sight of land, as on mid ocean. It embosoms a number of considerable islands. Ascending still farther west, we find

another strait, as the French word *Detroit* imports. It connects lake Erie with lake St. Clair, and is twenty-seven miles in length. Lake St. Clair is another clear and beautiful basin of water, thirty miles in diameter. The strait between this lake and Huron is thirty-two miles in length, and three-quarters of a mile in breadth, with a deep and rapid current. Lake Huron is the second on the continent in size, being two hundred and twenty by ninety in extent. It has the usual cold, transparent, and deep waters, is studded with many islands, and of a depth to be every where navigated by the largest vessels. At its western extremity, by the straits of Michilimackinack, it communicates with the singular lake, Michigan. This lake seems to be a kind of episode in the great chain, not appearing necessary for the expansion or conveyance of the waters collected above, in lake Superior. It is wholly in the limits of the United States, while half of the rest pertains to the dominions of Great Britain. Its extent is three hundred by fifty miles. It receives forty considerable rivers, has valuable fisheries of sturgeon and white fish, and embosoms some islands towards its northern extremity.

Returning to lake Huron, we find it connected with lake Superior by a strait of twenty-seven miles in length. The current of this river is shallow, rapid, and rendered difficult of navigation by huge masses of rock. Lake Superior is by far the largest collection of fresh waters on the globe, being three hundred and fifty by one hundred miles in extent, and reputed nearly one thousand five hundred miles in circumference. The water is transparent, and deeper and colder, than any of the rest. The shores, especially on the northern, are walled with frowning and lofty precipices of granite rock. All the lakes abound, and this more than the rest, with fine fish. They consist of different kinds of trout, all of them delicious, sturgeon, pike, pickerel, muskalunge, carp, bass, herrings, &c., and the best kind of all, white fish, which is found in this lake in greater perfection than in either of the rest. It embosoms some large islands. The principal rivers that discharge themselves into it, are Michipicoten, St. Louis, Nipegon, and Pic. Beyond this lake, and stretching still farther to the north-west, towards the frozen regions of Red river of the north, and the Arctic sea, is the long and narrow Lake of the Woods, apparently the *Ultima Thule* of our continent.

These lakes, from the circumstance that their waters possess less specific gravity than that of the ocean, and the comparative shallowness of their beds, and it may be from other causes, when swept by the winds, raise waves, if not so extensive and mountainous, more rough and dangerous than those of the sea. It has been repeatedly asserted, that they have septennial fluxes and refluxes. From the silence of the recent and intelligent travellers that have explored them, touching a fact so very

striking, we should be led to doubt it. It has been affirmed, also, that they have perceptible diurnal tides. We doubt this also; for were it even true, that the same causes, which raise tides in the sea, operated perceptibly here, the surface that could be operated upon is so small, compared with that of the ocean, that any general movement of the water would be so arrested by capes, points, islands, and headlands, that such a uniform result, as a diurnal tide, could hardly be calculated to take place in any sensible degree.

The waters of the lakes, in many instances collected from the same marshes as exist at the sources of the Mississippi, filtered through oozy swamps, and numberless fields of wild rice, where the shallow and stagnant mass, among this rank and compact vegetation, becomes slimy and unpotable, as soon as they find their level in the deep beds of the lakes, lose their dark and red color, and their swampy taste, and become as transparent almost as air. When the lakes sleep, the fishes can be seen sporting at immense depths below. The lower strata of the water never gain the temperature of summer. A bottle sunk an hundred feet in lake Superior, and filled at that depth, feels, when it comes up, as if filled with ice water. Imagination can not but expatiate in traversing the lofty precipices, the pathless morasses, and the dark and inhospitable forests of these remote and lonely oceans of fresh water, where the tempests have raged, and the surges have dashed for countless ages, unwitnessed except here and there at the distance of an hundred leagues by a few *red skins*, or more recently, Canadian *courcurs du bois*, scrambling over the precipices to fish, or paddling the periogues in agonies of terror to find shelter in the little bays from the coming storm.

Hundreds of rivers, though none of great length, discharge themselves into these inland seas. Situated as they are, in a climate generally remarkable for the dryness of its atmosphere, they must evaporate inconceivable quantities of water. It has been commonly supposed, that the Niagara, their only visible drain, does not discharge a tenth part of the waters and melted snow which they receive. They spread such an immense surface, and have so much of the grand levelling power of the ocean, that neither they, nor their outlet, the St. Lawrence, have any thing of that flood and subsidence, that form such a distinguishing feature in the Mississippi and its waters. Hence, too, the Niagara has little of marked alluvial character in common with the Mississippi. It rolls down its prodigious volume of waters, alike uninfluenced by droughts, or rains, by the heat and evaporation of summer, or the accumulated snows and ices of winter.

Will the shores of these vast and remote waters be ever settled, except by a few wandering trappers, fishermen, and savages? Shoals of immi-

grants from the old world are continually landing at Quebec and Montreal. Upper Canada is becoming populous. Wave is propelled beyond wave. Much of the country on the shores of the lakes is of an inhospitable and sterile character, never to be cultivated. There are, also, along their shores and tributary waters, sheltered valleys and large extents of fertile soil, sufficient for numerous and populous settlements. It is an inexplicable part of the composition of human nature, that men love to congregate and form the most populous cities and settlements in northern and inhospitable climes, rather than in the country of the banana and the pineapple. The astonishing advance of population and improvement, both on the American and British side of the country, has caused that the bosoms of the remotest lakes have been whitened with the sails of commerce. The smoke of the passing steam boats is seen rising in columns among their green islands. The shores have echoed with the exploding cannon of conflicting fleets. The northern forests of Ohio have already seen the red cross of a hostile squadron giving place to the *stars and stripes*. Roads are constructing to reach their shores. Canals are excavating to connect the whole extent of this vast chain with the Atlantic and the Gulf of Mexico. Is it too sanguine to predict, that within the compass of a century, their shores will count an hundred populous towns, where senates will debate and poets sing? That every nook of them will be visited by vessels and steam boats, and connected by roads and mail routes, and that the fisheries on them will become as much an object of national importance, as are now those of Newfoundland?

It is out of our plan to describe the rivers that empty into these lakes. But we shall notice the St. Lawrence; the next largest in North America to the Mississippi, and the counterpoise and rival of that mighty stream. Commencing his course for another ocean, and moving off in an opposite direction, he seems proudly determined to resemble his mighty rival in nothing but in bearing off the tribute of waters from a world. The former is continually swelling or subsiding; and in his spring floods, moving with a front many leagues in width, he has no resemblance to his autumnal course in a deep channel, and winding by benches and sandbars. His alluvial forests are wide and dark, with a vegetation of surpassing grandeur. His sides are marly and crumbling, and his bottom is cozy and of slime. His turbid waters, when united with those of the sea, dis-color it for fifty miles from its mouth.

The other is perpetually the same, steady, full, clear, and his current always sweeping. His bed is worn in strata of stone. His banks rise at once to the primitive soil. Bluffs of rock impend his course. Forests in their season beautifully verdant, but bearing the more healthy, stunted, and sterile character of the north, the larch, the pine, and the white birch,

bend over his waters, and before he meets the sea, vision can scarcely reach the opposite shore.

At the point where this river issues from lake Erie, it assumes the name of Niagara. It is something more than three quarters of a mile in width, and the broad and powerful current embosoms two islands; one of them Grand Isle, the seat of Mr. Noah's famous Jewish colony, containing eleven thousand acres, and the other, Navy Island, opposite to the British village of Chippeway. Below this island the river again becomes an unbroken sheet, a mile in width. For a half a mile below it seems to be waxing in wrath and power. Were this rapid in any other place, itself would be noted as one of the sublimest features of river scenery. Along this rapid, the broad and irresistible mass of rolling waters is not entirely whitened, for it is too deep to become so. But it has something of that curling and angry aspect, which the sea exhibits when swept by the first burst of a tempest. The momentum may be conceived, when we are instructed, that in half a mile the river has a descent of fifty feet. A column of water, a mile broad, twenty-five feet deep, and propelled onward by the weight of the surplus waters of the whole prodigious basin of the lakes, rolling down this rapid declivity, at length pours over the cataract, as if falling to the central depths of the earth. Instead of sublimity, the first feeling excited by this stupendous cataract is amazement. The mind accustomed only to ordinary phenomena and common exhibitions of power, feels a revulsion and recoil from the new train of thought and feeling, forced in an instant upon it. There is hardly sufficient coolness for distinct impressions, much less for calculations. We witness the white and terrific sheets—for an island on the very verge of the cataract divides the fall—descending more than one hundred and fifty feet into the abyss below. We feel the earth trembling under our feet. The deafening roar fills our ears. The spray, painted with rainbows, envelopes us. We imagine the fathomless caverns, which such an impetus, continued for ages, has worn. Nature arrays herself before us, in this spectacle, as an angry and irresistible power, that has broken away from the beneficent control of Providence. When we have gazed upon the spectacle and heard the roar until the mind has recovered from its amazement, we believe the first obvious thought in most minds is a shrinking comparison of the littleness and helplessness of man, and the insignificance of his pigmy efforts, when measuring strength with nature. Take it all in all, it is one of the most sublime and astonishing spectacles, seen on our globe. The eye distinctly measures the amount of the mass, and we can hardly avoid thinking with the peasant, that the waters of the upper world must shortly be drained down the cataract. But the stream continues to pour down, and this concentrated and impressive symbol of the pow-

er of Omnipotence proclaims his majesty through the forests from age to age.

An earthquake, the eruption of a volcanic mountain, the conflagration of a city, are all spectacles in which terror is the first and predominant emotion. The most impressive exertion of human power is only seen in the murderous and sickening horrors of a conflict between two mighty armies. These, too, are transient and contingent exhibitions of sublimity. But after we have stood an hour at the foot of these falls, after the eye has been accustomed to look at them without blenching, after the ear has become familiarized with the deafening and incessant roar, when the mind begins to calculate the grandeur of the scale of operations upon which nature acts, then it is that the entire and unmingled feeling of sublimity rushes upon it, and this is, probably, the place on the whole globe, where it is felt in its most unmixed simplicity.

It may be, that the beautiful and romantic country between Erie and Ontario receives a richer coloring from the imagination, excited strongly to action by dwelling on the contiguity of the great lakes, and the deep thunder of the falls heard in the distance. Remembrances of the bloody field of Bridgewater will be naturally awakened by this view. Be the cause what it may, every one approaches the falls, finding the scenery and accompaniments just what they should be. Every one finds this to be the very place where the waters of the upper world should pour upon the lower. We have figured to ourselves the bloody struggle of Bridgewater by the uncertain intervals of moonlight, and the feelings with which the combatants must have listened to the deafening and eternal roar of the cataract, which became audible whenever the crash of the cannon was for a moment suspended. Must it not have sounded as the voice of nature, mocking in her own sublime irony, the feeble and the mad wrath of man, in attempting these murderous and momentary imitations of her thunder and her power!

The Rideau canal connects lake Ontario with the river Ottawa and Quebec. The number of vessels employed on the lakes Erie, Huron, and Michigan, is fifty-three, besides steam boats, which make casual trips to Green Bay and Fond du Lac. The Welland canal, thirty-eight miles long, and ten feet deep, with thirty locks, overcoming three hundred and sixty feet, connects lake Erie by schooner navigation with lake Ontario.

NORTH-WEST TERRITORY.

NEARLY five hundred miles in length, and four hundred in breadth. Between $42^{\circ} 30'$, and 49° N. latitude, and $10^{\circ} 31'$, and $18^{\circ} 30'$, W. longitude. Bounded east by lake Michigan; north by lake Superior and the British possessions; west by the Mississippi, and a line drawn from its source to the northern boundary, which separates it from Missouri Territory. The most accurate account of this country is to be found in Long's second expedition. It is generally a hilly country, with the exception of extensive level prairies. At the western extremity of lake Superior, are the Cabotian mountains; and near the mineral district, the Smoky mountains. In some of its features, this country resembles Missouri territory; but has greater proportions covered with wood. The chief rivers, except the Mississippi, are Ouisconsin river, Fox, Chippeway, St. Croix, Rum, St. Francis, and Savanna of the Mississippi, Grand Portage, Ontonagon, Montreal, Mauvaise, Bois brule, St. Louis, and nearly fifty smaller streams, are waters of lake Superior. *Riviere la Pluie* falls into the Lake of the Woods. None of the lake rivers have a course of more than one hundred and fifty miles, and few more than fifty miles.

The largest river of the Mississippi, in this territory, is Ouisconsin, which rises in the northern interior of the country, and interlocks with the Montreal of lake Superior. It has a course of between three and four hundred miles, has a shallow and rapid current, which is, however, generally boatable in good stages of the water, and is eight hundred yards wide at its mouth. There is a portage of only half a mile between this and Fox river. It is over a level prairie, across which, from river to river, there is a water communication for periogues in high stages of the water.

Fox river has a course of two hundred and sixty miles. It runs through Winnebago lake. It has a fine country on its banks, with a salubrious climate. Chippeway is a considerable river of the Mississippi, and enters it just below lake Pepin. It is half a mile wide at its mouth, and has communications, by a short portage, with lake Superior. A canal of six miles, over a perfectly level plain, could connect this river with the preceding, and furnish steam boat navigation from Buffalo to the Mississippi.

This is a fine region for hunters. In the upper part of the country, buffaloes, elk, bears, and deer, are common. Beavers, otters, and muskrats are taken for their furs. The trappers and savages roam over immense prairies in pursuit of their objects. In some parts of it the soil is fertile. White and yellow pine, and white birch, are common among the forest trees. All the water courses, ponds, and marshes, are covered with wild rice, which constitutes a considerable part of the nourishment of the inhabitants. The head waters of the Mississippi are estimated to be one thousand three hundred and thirty feet above the level of the sea.

It is a country abundant in minerals. In it are found great quantities of the *terre verte*, or green earth, lead, copper, and iron. The lead mine district is in the lower part of the country, between Rock river and the Quisconsin. On Feyer river are the chief establishments of the present miners, and the mines are probably as rich and as abundant as any in the world. It has been asserted for half a century, that great quantities of native copper are found along the northern shore of lake Superior. On the Ontagon are great quantities of pure copper in detached masses. A single mass is estimated to weigh three thousand pounds. More recent and intelligent travellers have not realized the expectations that have been raised in respect to finding this metal. But lead and iron are found in various places, and sufficient indications of the existence of mines of copper.

The southern part of this extensive region possesses a climate comparatively mild, and not much unlike that of the northern belt of Missouri. At the Falls of St. Anthony the summers are temperate, and the winters extremely cold. The sources of the Mississippi are in a region severely inclement. At St. Peters, in 1820, the mean temperature of January was zero, a degree of cold not felt in any part of the United States that is much settled. The summer was temperate, and the atmosphere beautifully serene. Even at Prairie du Chien, though much more temperate, the winters are very severe. The following table is selected from Mr. Schoolcraft:

Place.	Date.	Average temperature.		Prevailing winds.
		Air.	Water.	
Detroit,	May 15 to 24	61°	00°	N. E.
River St. Clair,	24 27	51	52	N. W.
Lake Huron,	28 to June 6	51	51	N. W.
Mackinack,	June 7 to 13	55	00	S. E.
Mackinack to Lake Superior,	13 18	66	00	S. W.
Lake Superior,	19 27	66	58	N. W.
Ontonagon River,	28 30	80	73	N. W.
Water of Lake Superior,			66	
Ontonagon River to Fond du Lac,	July 1 to 5	64	61	S. W.
Between Fond du Lac and Sandy Lake,*	6 to 16	67		N. W.
At Sandy Lake,	17 24	73		
From Sandy Lake to St. Peters,	25 to Aug. 1	69		S. W.
Chicago,	January,	15	N. W. &	S. W.
	February,	32		S. W.
	March to 15,	29		N. E.

NOTE.—On the 10th of July, near the Falls of Packagama, the elevation being one thousand two hundred feet above the level of the sea, the night breeze was so cold that the water froze upon the bottoms of the canoes, and they were encrusted with a scale of ice of the thickness of a knife blade. The thermometer stood at 36° at sun-rise. There had been a heavy dew during the night, which was succeeded by a dense fog in the morning, and the forenoon remained cloudy and chilly.

Green Bay Settlement is situated at the outlet of Fox river, and contains nine hundred and fifty-two inhabitants. A few miles up Fox river of this bay, in a most romantic position, is an interesting Episcopal Missionary establishment. There are two or three other incipient establishments of hunters and trappers. Prairie du Chien is a considerable village. There are flour mills near it. It is a place of importance as an outfit from the lower Mississippi to the upper waters. It is situated near a beautiful prairie. The position of the village has been recently inundated. Most of the permanent inhabitants have Indian blood in their veins. At certain seasons of the year it is populous, bustling, and busy. Curious modes of justice, and of despatching business have been adopted here by prescription. The inhabitants in this village and settlement amount to four hundred and ninety-two. Frequent voyages are made from St. Louis to this place in keel boats. The richest copper mines, and large masses of pure copper, are found here. One-third of the land is fit for farming, and one-sixth well timbered.

*The distance from Fond du Lac to Detroit is 1,100 miles.

This vast region has hitherto been politically connected with Michigan territory; but as that territory has as distinct geographical limits as any state in the Union, and this region is only connected with that by circumstances of a temporary nature, it is evident that this country ought to be viewed, at least geographically, as a territory by itself.

Prairie du Chien, Cassville, and Green Bay, are the largest villages, and the whole population is rated at sixteen thousand. Three thousand immigrants for this country passed through Buffalo in a single week.

A correspondent of the Buffalo Journal gives an agreeable picture of that portion of this territory which has been lately ceded to government by the Menominee Indians, and in which he had just made an excursion. The tract reserved to the Indians, of 500,000 acres, is also a fine body of land, containing very extensive and fertile meadows along the Fox river, with woodlands of good timber, in which there is no underbrush. The writer proceeded thirty-eight miles from Green Bay, up the Fox river to Winnebago lake, passing rapids whose whole descent is about one hundred feet. The river is ninety yards wide, its bed a limestone rock, the banks from fifty to one hundred and fifty feet high. The water power is of course adequate to move any machinery. Doty's island, in the outlet of the lake, contains four hundred acres, heavily timbered. The bank of the lake itself is covered with trees of a height and diameter indicating the nature of the soil, which is black loam, rich and deep. The Cliff, so called, is a mountain, three hundred feet above the level of the lake, presenting a picturesque prospect. The main roads, leading from Green Bay to Chicago, Ouisconsin, Portage, the Lead Mines, and Galena, will probably pass this point. Beyond this, the mountain recedes, three or four miles from the shore, forming a valley fifteen miles in length, of as fertile land as can be found in the United States, terminating to the south in a dry prairie called Cass Plains. These plains contain twenty-five thousand acres of rich land, which are already cleared by nature for the plough; and they extend to the Manitowoc river. Soon after begin the prairies which run, with scarcely any timber, to the Mississippi. In the whole distance, near one hundred miles, passed by the writer, the land seems to be of the kind and aspect just described; namely, rich prairie, with occasional growths of fine timber, equally indicative of fertility. A road from the mouth of Fond du Lac river to Galena, would be of great advantage to the mines, and a direct route for one might be followed at a trifling expense. It would facilitate the transportation of property from New York by the canal and the lakes.

MISSOURI TERRITORY.

LENGTH, nine hundred miles; breadth, eight hundred. Between 36° $30'$ N. latitude, and 13° $40'$ and 35° $10'$ W. longitude. Bounded by the British possessions on the north; east by the North-West Territory, Illinois, and Missouri; south and south-west by the territories of the Mexican Republic; west by the Rocky mountains. No writers have given such striking general views of this country as the gentlemen of Long's first expedition.

The belt of country, partially wooded, extends generally from two to four hundred miles west of the Mississippi and its waters. There commences that ocean of prairies, that constitutes so striking and impressive a feature in the vast country beyond the Mississippi and Missouri. This vast country is for the most part a plain, more or less covered with grass, in great extents; in other extents almost a moving sand. It is pastured and trodden by countless number of buffaloes, elk, and other wild animals that graze upon it. In some places, as on the Missouri, spurs of the mountains are encountered long before we reach the main ridge. In other places, as at the outlet of the Arkansas from the mountains, these mountains spring up, as the eternal barriers of the plains, directly from their base. One mountain is distinguishable from all the rest. We have wished that it might be denominated Mount Pike, from the name of the intrepid and adventurous traveller, who gave us the first account of it. Its black sides and hoary summits are a kind of sea mark at immense distances over the plain. It elevates its gigantic head, and frowns upon

the sea of verdure, and the boundless range of buffaloes below, taking its repose, solitary and detached from the hundred mountains, apparently younger members of the family, which shrink with filial awe at a distance from it.

The Rocky mountains commence in the unexplored regions to the north-west of the United States, and ranging across the sources of the Missouri, the Roche Jaune, Platte, Arkansas, and Red river, in the Mexican states of Texas and Coahuila, they diverge and unite with the ranges of Mexican mountains. They separate the waters of the great tributaries of the Mississippi from those that fall into the Columbia, or Multnomah, the Great Lake of Bueneventura, and other waters of the Pacific. They have a far greater extent than the Alleghany mountains, are a wider range, and for the most part run, like them, in parallel ridges, though generally more ragged, detached, and broken, and are by no means so regular. They are also of a character decidedly more primitive. Their black, precipitous, and frowning appearance has probably given them the name of the Rocky mountains. Their bases have an elevation of between three and four thousand feet above the level of the sea. James', or Pike's mountain has been given as twelve thousand feet in height. As this vast range of mountains is as yet but very imperfectly known, there is little reason to doubt, that many of the peaks, when more fully explored, and more accurately measured, will be found to approach much nearer in height to the highest ranges in Mexico, than has been commonly supposed. Most of the more elevated summits are above the point of perpetual congelation. In one respect they resemble the Alleghanies. In numerous places, the waters that run into the Pacific rise near those that fall into the tributaries of the Mississippi. Thus has nature kindly provided points of easy transit from the eastern to the western side of these frowning and apparently impassable barriers of nature. By communications of unquestionable veracity, from persons engaged in the Missouri Fur Company, we learn, that following up the valleys of the sources of the Platte to the opposite valleys of waters that fall into the Great Lake of Bueneventura, on the other side, a good road was found, and easily passable by loaded wagons.

The waters of this great inland sea were found by General Ashley to be much saltier than those of the ocean. He descended a boatable river one hundred and fifty miles to reach it. He coasted it with canoes, and found it to be one hundred miles long, and from sixty to eighty wide. From this lake he returned to St. Louis in seventy days. He found game so abundant that he could have subsisted one thousand men on their whole route. The caravan crossed the mountains by the valley of the North Fork of the river Platte. The ascent and descent of the mountains

never exceeded three degrees. Many of this party had been in these remote mountain solitudes five years in perfect health.

This line, when viewed at a distance, every where seems continuous, iron bound, and impassable. The mind recoils from the attempt as hopeless, to find a way over such frowning and formidable barriers. There is no doubt that within half a century the waters of the Mississippi will be united with those of the western sea by navigable canals.

What are called 'The Gates of the Rocky Mountains,' through which the Missouri seems to have torn itself a passage, are commonly described as among the sublimest spectacles of this range of mountains. For nearly six miles these mountains rise in black and perpendicular masses, one thousand two hundred feet above the surface of the river. The chasm is little more than one hundred and fifty yards wide; and the deep and foaming waters of the Missouri rush through the passage as if it were a cataract. The heart of the beholder is chilled as he contemplates, in these wild and uninhabited regions, this conflict between the river and the mountains. The smooth and black walls of the cleft rise more than twice as high as the mountains on North river, below West Point. Every passenger up North river has been impressed with the grandeur of that scene in the midst of amenity and life. What then must be the sensations of the passengers through the 'Gates of the Rocky mountains,' who witness the proofs of this conflict of nature, in a region three hundred leagues from civilization and habitation? Vast columns of the rock, torn from the mountains and lying along the river, attest the fact of this forced passage of the river through the mountains. The Black Hills, the elevated table lands between the heads of the Missouri and the Mississippi, called *Coteau du Prairie*, the Ozark mountains, and the Masserne mountains, may all be considered as collateral ranges of the Rocky mountains.

The principal tributaries of the Mississippi in this territory are River de Corbeau, St. Peter's, Cannon, Upper Ioway, Lower Ioway, and des Moines. An interesting and accurate account of St. Peter's is given in Long's second expedition. It is one of the principal upper waters of the Mississippi, and has a course of two hundred and fifty miles. It enters the Mississippi at the Falls of St. Anthony, by a mouth one hundred and fifty yards wide, and a depth of fifteen feet water.

The principal tributaries of the Missouri are given in the following table:

<i>Rivers.</i>	<i>Width at outlet in yards.</i>	<i>Supposed length.</i>	<i>Side on which they enter.</i>
Milk river,	150	200	N.
Yellow Stone,	297	600	S.
Little Missouri,	134	225	S.
White river,	150	200	W.
Running Water,	152	300	S. W.
Jacques,	90	300	N.
Sioux,	110	270	N.
Platte,	600	700	W.
Kansas,	340	550	W.
Grand river,	90	200	N.
Charaton, E.	30	150	N.
Charaton, W.	70	180	N.
Osage,	397	350	S.
Gasconade,	157	150	S.

Red river of the North rises near the sources of St. Peter's, and by a northern and winding course runs nearly two hundred miles in our territorial limits, and then passes into the British dominions of Upper Canada, and empties itself into lake Winnepeck. Its principal branches are Red Lake river, and Mouso river, which latter stream rises within a mile of fort Mandan on the Missouri. Red river is a broad, deep, and very interesting river, abounding with fish, and the country along its banks with elk and buffaloes. It is on the banks of this remote stream that Lord Selkirk's very interesting colony is settled.

The next grand tributary to the Mississippi, after the Missouri, as we have already remarked, is the Arkansas. The head waters of this river were first explored by Pike, and afterwards more thoroughly by Long. This survey reached to Bell's Springs, $38^{\circ} 32'$ N. latitude, and $28^{\circ} 45'$ W. longitude. Indians and hunters describe its sources to be nearly two hundred miles north-west from that point. From Bell's Springs it runs in a direction generally south-east by its windings, two thousand miles, and one thousand two hundred in a straight direction to the Mississippi. It runs through a country where the traveller can often see nothing but a grass plain, boundless to the vision. The Nagracka and Grand Saline are the principal upper tributaries of the Arkansas. The lower belt of this region is of secondary formation. The middle belt, extending from the Council Bluffs to the sources of the Nagracka, contains lime stone and pit coal. The upper belt is primitive and granitic. The lead mines below Prairie du Chien have already been described. Blue and green

earths, which the Indians use as paints, and the beautiful red pipe stone of the St. Peter's, have already been mentioned. The elevations of the south-west part of this region have been given as follows: Eastern limits of the territory on Osage river, 750 feet in height. Neosho river, 1,000. Arkansas, at the base of James' Peak, 2,500. Summit of the peak, 11,000 feet.

The surface and soil of this vast extent of country is different from any other of the same dimensions on the globe. The lower courses of all the rivers that enter the Mississippi from this region are wooded. In proportion as we ascend toward the mountains, the wood becomes more scarce, and the upper tributaries of these streams run through open prairies. There is also a fertile belt along the banks of all these streams; but in proportion as we diverge from them, the land becomes more sterile and parched. We sometimes may travel whole days without seeing water. Great extents of this country may be likened to the great Sahara of the African deserts. There is, however, in the most sterile parts, a thin sward of grass and herbage. Countless droves of buffaloes, elk, and deer, range upon these vast prairies. These will probably, in some future period of our national existence, be replaced by herds of domestic cattle, and flocks of sheep, followed by moving bands of shepherds. Almost the whole courses of the Missouri, Platte, and Yellow Stone, are through a rich soil. The same may be affirmed of Red river. The upper courses of the Arkansas are through the most sterile region of this ocean of prairies.

Climate. In a country of such immense extent, generally level, naked, and open, the climate must of course in a great measure correspond to latitude. The first climate beyond the state of Missouri and the territory of Arkansas is mild and temperate. The belt beyond has nearly the climate of New England. Still farther towards the mountains it is Canadian. Pike and other travellers speak of encountering storms of sleet and hail in the summer, near the sources of the Arkansas. When the winds blow from the west over the summits of these mountains, and bring down on these vast plains the temperature of the regions of perpetual frost, we may of course expect such a change of temperature near their bases. We select the following table, as compiled by Mellish from the travels of Lewis and Clark, as conveying a synoptical view of the climate of this country.

	<i>Highest.</i>	<i>Lowest.</i>	<i>Mean.</i>	<i>Prevailing winds.</i>
1804.				
Sept. 19 to 30, Big Bend to Ricaree, lat. 46°,	88°	42°	63°	S. E. & S. W.
Oct. Ricaree to Mandan, lat. 47° 30',	62	32	47	N. W. & S. E.
Nov. Fort Mandan,	62	12	34	N. W. & S. E.
Dec. Fort Mandan,	38	—45	0	N. W.
1805.				
Jan. Fort Mandan,	36	—40	34	N. W.
Feb. Fort Mandan,	38	—18	11	N. W. & S.
March. Fort Mandan,	40	— 2	28	N. E. & S. E.
April. Fort Mandan to 24 miles beyond Martha's river, lat. 48°.	80	24	49	N. W. S. & W.
May. Martha's river to Stone Wall creek, lat. 47° 15',	82	28	52	S. W.
June. Stone Wall creek to falls of Missouri, lat. 47° 15',	76	35	56	S. W.
July. Falls to Philosophy river, lat. 45°,	90	52	65	S. W.
Aug. Philosophy river to the head waters of Columbia river, lat 44°.	91	31	57	S. W.

N. B. — Signifies below Zero.

GENERAL REMARKS.

- September 23. The air remarkably dry.
 October 5. Slight frost. 18. Hard frost. 27. Went into winter quarters at Fort Mandan.
 November 9. Strong frost. 13. Much drifting ice. 30 Indians cross the river on the ice.
 December 5. Excessive N. W. wind. 7. River closed. 28. Strong wind.
 January 3. Snow 9 inches deep. 8. Snow 10 inches. 19. Ice 3 feet thick on the most rapid part of the river.
 March 2. River partially open. 26. Ice broke up and descended in immense shoals. 30. Ice floating in great quantities.
 April 1. A fine shower of rain, the first since the 15th of September.— The air dry and remarkably pure.
 April 4. Hard gales; scarcely any timber to shelter the country, and the winds blow with astonishing violence.
 April 7. Left Fort Mandan.
 April 11. Vegetation appears. 18. A heavy dew, the first since the 15th of September. 21. White frost.
 May 2. Violent wind; snow and vegetation intermixed.
 May 4. Snow disappeared. 9. Choke cherry in bloom.
 May 18. Wild rose in bloom. 23. Strawberries in bloom.
 May 26. The air warm, fine, and dry.

June 27. Thunder, lightning, and hail, so large that one stone was 7 inches in circumference, and weighed 3 ounces.

July 6. Rain, thunder, and hail; a blackbird killed by the latter.

July 7. Near the sources of Missouri. 21. A sudden cold caused a difference of 50° in the thermometer in 8 hours.

At Council Bluffs, in the summer of 1820, the greatest heat was 105°, and the winter's cold 22° below Zero. Same year at St. Peters, 93° heat, and 30° below Zero cold.

This country is part of the purchase of Louisiana, and has been explored by Lewis and Clark, by Pike, and the gentlemen of Long's expedition. We have gleaned information, also, from hunters and trappers, who have traversed it in all directions, and who have lived long in it. It is inhabited by various tribes of Indians, of whom the Sioux are the most numerous. The whole number is estimated between 130,000 and 140,000.

Much important information, touching the south-west part of this vast region, has been recently afforded by Mr. James O. Pattie, who passed seven years, in trapping, on the upper waters of the Arkansas, Platte, Yellow Stone, and other waters of the Mississippi, on the Helay of Rio del Norte, a river before unexplored by white people, and which he ascended from its junction with the Del Norte to its head source. He crossed the Rocky mountains in various points, and a number of times. Most of the peaks were found covered with perpetual snow. He descended the Rio Colorado, or Red river of California, from its source to its junction with the Pacific. It is a large river, with a course, by its curves, of more than one thousand miles; and in many of its characteristics, particularly in the extent of its alluvion, it resembles the Mississippi. It waters a beautiful and interesting country, on which not a vestige of civilized habitation exists. Its whole course is through forests and prairies, and undescribed tribes of naked savages. He visited a salt hill not far from the sources of the Platte, and loaded mules with the salt, for Santa Fe. He discovered in the uninhabited country, ores of iron, copper, and silver in great abundance; a great variety of useful fossils, and a country altogether of a most interesting character.

OREGON TERRITORY

THIS Territory has been so named in the Congressional discussions, that have taken place in reference to the country. It is a country of vast extent. Its southern limits are clearly defined in our late treaty with Spain, being on the 42d parallel to the Pacific. Our limits to the north-west are yet in question with those of Russia, which claims to the 51st parallel. Our limits with Great Britain are the 49th parallel. It has, therefore, the British and Russian possessions on the north; the Pacific on the west; the Mexican dominions on the south; and the territories of Arkansas and Missouri on the east; and may be assumed as stretching between 41° and 49° N. latitude, and 34° and 48° W. longitude. The stupendous ridges of the Rocky mountains, which we have already described, bound this country on the east. The waters that rise in the western declivities of these mountains flow into the Columbia, the Multnomah, and the lake Bueneventura. Most of the elevated summits of the mountains are above the limits of perpetual congelation. Beyond the mountains the country descends by regular belts, in the form of immense terraces, or descending plains, disposed regularly the one below the other. Beyond the first plain, and between the Rocky mountains and the Pacific, is another extensive and high chain of mountains, in which are the great falls of the Columbia. Still west of these, and running parallel with the coast, and at the distance of one hundred and fifty miles, is the third and last chain. The peaks of all these chains are covered with perpetual snow. The highest peaks have been named Mount Baker, Mount Regnier, Mount St. Helens, Mount Hood, and Mount Jefferson.

The only rivers explored in this region are the Columbia and its branches. This noble river has its head waters near those of the Missouri. It collects its tribute for a wide extent along the western dividing ridges of the Rocky mountains. Immediately upon emerging from these mountains, it has become a broad and deep stream. Having received Clark's and Lewis' rivers, each large streams from the east, it is already nine hundred and sixty yards wide. It there forms a great southern bend, and breaks through the second chain of mountains. One hundred and thirty-six miles below, are the great falls, where the river descends in one rapid 57 feet. Below these falls it winds first to the north-west, and then to the south-west, and passes through the third chain of mountains; where it is again compressed to the width of 150 yards. Below this rapid, at 180 miles from the sea, it meets the tide, beyond which it has a broad estuary to the sea. Sixty miles below the rapids, Multnomah, a very large and unexplored tributary, falls in from the north-east. The mouth of the river is in $46^{\circ} 24'$, and the tide there rises eight and a half feet. The Columbia and its tributaries abound in the finest salmon, which seem in fact to constitute the chief article of food of the savages west of the Rocky mountains. Seals and other aquatic animals are taken in this river in great numbers; and the skins, shipped to China, constitute the chief article of trade from this great river. A number of the head streams of the Missouri interlock with the waters of this river, as Wisdom river with Clark's of the Columbia; and Jefferson of the Missouri with Lewis' of the Columbia. Clark's river has a course, between 2 and 300 miles in length, before it unites with the Columbia. Lewis' river is a large and long tributary of the Columbia. In its course, it receives North Fork and Kooskooskee, and after winding 600 miles falls into the Columbia from the east, by a mouth 250 yards wide.

The geological character of this country is little known; but the western declivities of these mountains are presumed to be primitive and granitic. The country must have an abrupt slope to the Pacific, descending as much in 600 miles to the west, as it does in 1,500 to the east. The summits of these mountains of course are sterile, being ragged rocks, and covered with snow the greater part of the year. But among these mountains there are sheltered and fertile valleys. The timber in the mountains is pine, spruce, fir, and the other terebinthines. The terrace plains below, generally have a fine soil, but are very deficient in timber. The prairies, like those on the eastern sides of these mountains, are covered with grass, and a profusion of most beautiful flowers. Among the prairie plants are two or three kinds of edible roots, which furnish vegetable food to the savages, as an aid to the great proportion of salmon which they devour. Wild sage is also an abundant herb. It grows of a size and

height to be like a small tree; and on these extensive plains is one of the principal articles of fuel. The sea shore, for a considerable distance into the interior, is skirted with deep and thick forests of evergreens, such as pine and hemlock. On the whole, it is believed that few countries on the earth have a more fertile soil, and agreeable climate, than those of this region west of the Rocky mountains. Baron Langsdorf has given us a very delightful and apparently just and discriminating account of the countries belonging to the Missions of St. Peter and St. Paul, in the Mexican country, bounding on the southern limits of this country. The mildness of the climate is surprising. Sheltered on the north by protecting ridges of mountains, and the breezes from the west being softened by coming over immense extents of sea, the climate is as mild as it is in the country east of these mountains, four or five degrees south of that point. Langsdorf describes these countries, extending to our southern limit, as the country of oranges and figs, of verdure, health, and fertility. We scarcely remember to have seen more sober pictures of a more desirable country, than those drawn by him of that region. They correspond with the accounts of Lewis and Clark, and other travellers, who have explored that country. When these intelligent and intrepid travellers left the country in March, and in the latitude of Montreal, the prairies were in blossom, and the forwardness of the season seems to have corresponded with that of North Carolina at the same time. It is true, the winters are rainy, and some parts of them severe.

The following table will serve to convey clear ideas of the temperature of these regions:

TABLE OF THE WINDS, AND REMARKS ON THE WEATHER, BETWEEN
THE ROCKY MOUNTAINS AND PACIFIC OCEAN.

Month.	Place.	N.	N.W.	N. E.	E.	S. E.	S.	S.W.	W.
Sept. 1806.	From Dividing Ridge } to Canoe Camp,	4		9	6	2		9	
Oct.	Canoe Camp to Tide Water,	2			8	4		12	
Nov.	Shores of the Pacific,			4		8	1	15	2
Dec.	do.			4	2	5		20	
Jan.	do.	1		6	2	4	2	15	1
Feb.	do.			5			3	20	
March 20.	do.	1		6	1	8	4	11	
April.	To outlet of Kooskooskeo } River,	4		4	2	2		11	7
May.	To Quashnash Flats,	5		1		11		11	
June.	To Traveller's Rest,	21				8		1	
July 8.	To Dividing Ridge.	2						6	

REMARKS.

- September. Fair 19 days, rain 7, snow 4 days.
 October. Fair 21 days, rain 5, cloudy 2.
 November. Fair 7 days, rain 17, cloudy 6.
 December. Fair 3 days, rain 27, cloudy 1.
 January. Fair 7 days, rain 19, cloudy 3, snow 2.
- January. The loss of the thermometer sincerely regretted. The parties confident that the climate is much warmer than in the same parallel of latitude on the Atlantic Ocean. There has been only one slight white frost since the 7th of November. "We have seen no ice, and the weather is so warm that we are obliged to cure our meat with smoke and fire to save it."
12. The wind from any quarter off the land, or along the north-west coast, causes the air to become cooler.
14. Weather perfectly temperate. Never experienced so warm a winter as the present.
25. It is now perceptibly colder than it has been this winter.
28. Pretty keen frost. The coldest night of the season.
- February. Fair 6, rain 16, cloudy 5, snow 1 day.
8. The feeling of the air indicated that the rigor of the winter had passed.
24. Quite warm.
- March. Fair 8, rain 16, cloudy 7.
1. So warm that fire was unnecessary.
13. Plants began to appear above ground.
15. Plants put forth their leaves.
25. Gooseberry bushes in leaf.
26. Humming birds appear.
30. Grass 10 inches high in river bottoms.
- April. Fair 20, rain 7, cloudy 3 days.
6. Cotton wood in leaf.
12. Vegetation is rapidly progressing in the bottoms, though the snow reaches within a mile of the base of the mountains at the Rapids of Columbia.
- May. Fair 19, rain 5, cloudy 6, snow 1.
3. An increase of snow in the mountains last evening.
10. Weather cold with a heavy fall of snow.
22. The air remarkably dry and pure.
27. The snow has disappeared on the high plains, and seems to be diminishing fast on the spurs and lower regions of the Rocky mountains.
- June. Fair 20, cloudy 5, rain 5.
2. A great rise in the river in consequence of the melting of the snow in the mountains.
3. River at its greatest height.
5. The wild rose in bloom.
6. The vining honey-suckle in bloom.
22. Strawberries ripe at Quashnash Flats.
- July to 8. Fair 6, rain 2 days.
5. A dew this morning; the nights cool; the mosquitoes troublesome.

6. In the open plain there was a violent wind from the north-west, accompanied by hard rain.
8. A heavy shower, accompanied by hard rain from the south-west.

This country was first discovered by the Spaniards. In 1791, Captain Gray, of the ship *Columbia*, of Boston, entered the river, and from his ship it received its name. It was occasionally entered by navigators afterwards. In 1805, Lewis and Clark descended this river from the mountains to the Pacific, and spent the winter on its shores. They returned by the same river to the mountains; and most of the exact information that we have of the country is from them. For some years a settlement of fur traders, called Astoria, has existed here. The chief intercourse of this place is with China. The question of settling this delightful country permanently, has been more than once debated in Congress. Were such settlements authorized and rendered secure by the requisite military establishments, there can be no doubt but it would receive large accessions of immigrants. The number of Indians of the different tribes is estimated at 140,000.

A company is understood to be now forming, of emigrants principally from New England, who intend to assemble at St. Louis, ascend the Missouri, and cross the mountains to the plains of the Oregon. Settlements to a considerable extent already exist on this river. Many of the settlers are understood to be British, within the territorial limits of the United States. They have great stocks of cattle, sheep, and horses. On a stream that enters the Oregon not far from the Great Falls, they have mills, and admirable water privileges for an indefinite number. It is confidently believed, that no part of the territory of the United States, in point of soil, climate, and commercial advantages, holds out stronger inducements to emigrants than this country.

As the Mexican States of Texas, Coahuila, and Sonora, bound the country, admitted by the treaty of the cession of Florida to belong to the United States in its whole extent, from the upper waters of Arkansas and Red river to the Gulf of California, it is presumed that a sketch of those states will not be unacceptable in this place.

It is well known that Texas has already received a very considerable proportion of its present population in emigrants from the United States. The body of trappers and traders from Missouri across the prairies to Santa Fe in New Mexico, is numerous and increasing. The trade has received a regular form, and has already had a very sensible effect upon the growth of the town of Santa Fe, and the adjoining country. Many of these traders have formed connections, and intermarriages, and have found homes there. Santa Fe may be considered, in some sense, an

American town, the stores being filled with American goods, and the streets with American people.

The Americans have explored the whole country from the sources of the Rio del Norte to its mouth, in search of furs, and in pursuit of a lucrative traffic. There are few of the towns of New Mexico, in which more or less of them are not to be found. Constantly oppressed by the ignorant, miserable, bigotted, petty despots of these semi-barbarous regions, who assume to be republican rulers of an amicable sister republic, the United States emigrants, like the Jews, multiply and thrive under the extortions and cruelties practised upon them. Never was a more vivid and artless picture of these oppressions presented, than in the recently published journal of James O. Pattie, of seven years wanderings and imprisonment among these people. Having personally explored all portions of the country to Rio del Norte, and thence to the Pacific, we consider his narrative the most exact, as well as interesting account of that country, that has yet been published. He has reversed many previous impressions in regard to its sterility and destitution of rains. Copious rains are noted in his journal, as events of frequent occurrence. In Texas and in Sonora, he speaks with enthusiasm of the verdure and fertility of the country, in his diurnal movements. He is seldom out of sight of mountain peaks, white with perpetual snow. His sketches of the Mexican people, of their superstitious devotion to the ceremonials of their church, of their amusements, and bull baiting, are fresh and graphic, presenting these singular semi-barbarians in a new light. He describes the tribes of the Umeds, Eliotaro, and Nababoes, with a considerable degree of detail, as he traversed their whole extent of country, and met them, both in battle and in friendship. He describes them as of uncommon stature, and the finest forms; and most of them, both males and females, entirely naked. Their arms were bows and arrows, the arrows of reed, headed with flint, and the bows rendered elastic by adding buffalo bones to the tough wood. These are the savages that occupy the country along the course of Red river of California.

In travelling from the estuary of that uninhabited river to the Catholic missions of California, he passed over an immense sand plain, totally destitute of all herbage but the prickly pear. Here he and his party were near perishing of thirst. At length they reached a lake, but its waters were saltier than those of the sea. White bears, white wolves, antelopes, and mountain sheep, were the animals they most frequently met. White bears in numbers and of a ferocity never before adequately described, render trapping and hunting in these regions a perilous employment, even were there no savages to encounter.

His description of the country along the Gulf of California, occupied

by the Catholic missions, is of great interest and freshness. It corresponds, in most particulars, with the account of the country given by Langsdorf in his voyages and travels. Mr. Pattie visited each one of the Missionary stations, having been liberated from a long and painful imprisonment in San Diego, on the express condition that he should vaccinate all the inhabitants of the several missions.

He describes the country as one of the most charming and delightful of which the imagination can form an idea. The missions are situated along a wide belt of plain of the richest soil, literally covered with sheep, cattle, horses, and domestic animals. The missions are surrounded with beautiful vineyards, yielding pleasant and generous wine, and all the fruits of the temperate, and most of those of the tropical climates.

He travelled along this extensive plain from mission to mission, directly on the verge of the sea shore, viewing on the one hand, the expanse of the Pacific, and the whales, sea lions, and other monstrous water dwellers, performing their unwieldy gambols; and on the other hand, mountains white with snow, from which innumerable cool streams descended to irrigate the fields. The names of the Missions are San Diego, San Luis, the largest and handsomest of the whole, St. John the Baptist, St. Gabriel, St. Ferdinand, St. Bueneventura, St. Barbara, Santa Cruz, St. Enos, St. Luis Obispos, St. Michael, St. John Capistrano, La Solada, San Carlos, St. Anthony, and San Francisco. In these places he vaccinated twenty-two thousand persons, the greater portion of them converted Indians, the condition of whom he represents to be very similar to that of our slaves. They are carefully watched to prevent their escape to their native forests. When the husbands and fathers of the females are absent, the holy fathers lock them up at night and preserve the key. These missions number their cattle, sheep, horses, and mules by tens of thousands. Though in a tropical climate, the temperature was uniformly cool and delightful.

The fathers have procured for themselves, by the aid of these thousands of converted Indians, the most delightful abodes in the world. Their apartments were sumptuously furnished. Their tables were spread with plate, and an ample supply of the most delicious wines; and they have had the good fortune to have secured for themselves a paradise in these solitary regions, as a prelibation of the rewards reserved for them hereafter, for their labors in converting the heathens. This country is contiguous, and these people will be the nearest whites to our settlements in the Oregon territory.

Mr. Austin, formerly a citizen of the United States, has settled, under the auspices of the Mexican government, a considerable colony, composed almost entirely of emigrants from the United States, on the Brascos